ASSESSING THE COMMON CORE

Rethinking Instruction and Assessment for Deeper Learning
Changes Afoot in California

- Adoption of **Common Core State Standards** and **Next Generation Science Standards**
- Changes in the Assessment System
  -- Shift to Smarter Balanced Assessment Consortium
  -- Elimination of other CSTs
  -- Reconceptualization of Assessment System
A New Concept of Accountability

- Changes in the API
  -- Less Emphasis on Standardized Tests
  -- More Emphasis on Graduation, College and Career Readiness, and Healthy School Functioning

- Commitment to Multiple Measures

- Investment in Improvement, Not Punishment

- Development of Stronger Professional Accountability

- Commitment to Resource Equity and Accountability
Key Aspects of the CCSS

- Reading complex texts closely
- Communicating effectively in multiple media and across content areas
- Using evidence; justifying ideas
- Engaging in inquiry and research

- Engaging in mathematical practices that use mathematical reasoning and problem solving in application
- Using mathematical skills across content areas and contexts
<table>
<thead>
<tr>
<th>1970</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing</td>
<td>Writing</td>
</tr>
<tr>
<td>Computational Skills</td>
<td>2</td>
</tr>
<tr>
<td>Reading Skills</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communications</td>
<td>4</td>
</tr>
<tr>
<td>Listening Skills</td>
<td>5</td>
</tr>
<tr>
<td>Personal Career Development</td>
<td>6</td>
</tr>
<tr>
<td>Creative Thinking</td>
<td>7</td>
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<td>Leadership</td>
<td>8</td>
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<td>Goal Setting/Motivation</td>
<td>9</td>
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<tr>
<td>Teamwork</td>
<td>10</td>
</tr>
<tr>
<td>Organizational Effectiveness</td>
<td>11</td>
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<tr>
<td>Problem Solving</td>
<td>12</td>
</tr>
<tr>
<td>Interpersonal Skills</td>
<td>13</td>
</tr>
</tbody>
</table>

**FORTUNE 500 MOST VALUED SKILLS**
Knowledge, Skills, and Dispositions for Postsecondary Success
Depth of Knowledge

OLD

NEW
# PERCENTAGE OF DEEPER LEARNING TEST ITEMS / TARGETS IN STATE TESTS

<table>
<thead>
<tr>
<th></th>
<th>MATH</th>
<th>ENGLISH/LANGUAGE ARTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DOK3</td>
<td>DOK4</td>
</tr>
<tr>
<td>Current state</td>
<td>&lt;2%</td>
<td>0%</td>
</tr>
<tr>
<td>assessments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New state tests</td>
<td>49%</td>
<td>21%</td>
</tr>
<tr>
<td>under development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(SBAC)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DOK = Depth of Knowledge
Source: Yuan & Le (2012); Herman & Linn (2013)
John’s solution to an equation is shown below.

Given: \( x^2 + 5x + 6 = 0 \)
Step 1: \((x + 2)(x + 3) = 0\)
Step 2: \(x + 2 = 0\) or \(x + 3 = 0\)
Step 3: \(x = -2\) or \(x = -3\)

Which property of real numbers did John use for Step 2?

A. multiplication property of equality
B. zero product property of multiplication
C. commutative property of multiplication
D. distributive property of multiplication over addition
Math Depth of Knowledge Level 4 (Grade 7)

Max bought two items that were on sale.
One item was 10% off
One item was 20% off

Max says he saved 15% all together.
A. Could Max be right?
B. Could Max be wrong?

Justify your answers.
The initial 10MPH over the speed limit is assessed a $50 fine. In other words, there is a flat fee for the first 10MPH. Each MPH above the initial 10MPH is then calculated at $10 per MPH thereafter. In addition to the fines established relative to the speed traveled, there is a $50 assessment applied to the fine schedule which goes to a Head Injury Fund established by the state.

Example: 46MPH in a 30MPH zone = 16MPH over the speed limit
Fine = $50 Head Injury Fund assessment + $50 (first 10MPH over the speed limit) + $60 (next 6MPH) = $160

Table 3: Summary of New York Speeding Penalties

<table>
<thead>
<tr>
<th>Normal Circumstances</th>
<th>Minimum Fine</th>
<th>Maximum Fine</th>
<th>Imprisonment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 10 mph over limit</td>
<td>$45</td>
<td>$150</td>
<td>None</td>
</tr>
<tr>
<td>11 to 30 mph over the limit</td>
<td>$90</td>
<td>$300</td>
<td>Up to 15 days</td>
</tr>
<tr>
<td>More than 30 mph over the limit</td>
<td>$180</td>
<td>$600</td>
<td>Up to 30 days</td>
</tr>
</tbody>
</table>

The court determines the actual fine assessed within these ranges.

Tasks that ask students to determine which information is relevant to problem solving and which is extraneous support the goals of Claim 4.
Which of the following statements from the passage supports the author’s conclusion that carrier pigeons sometimes had a dangerous job?

A  In 1815 an English banker named Nathan Rothschild made his fortune by relying on messages sent to him by carrier pigeons.

B  Since they could easily be released from airplanes or ships, every branch of the armed services used the birds.

C  On his last mission, though wounded, he carried a message that saved the lives of 194 American soldiers.

D  Many people find carrier pigeons ugly because of their big wattle, a knobby buildup of skin on the beak.
As chief-of-staff for a U.S. Congresswoman, you need to address a proposal by a power company to build a nuclear plant in the state, to be announced tomorrow morning. You must:

- Conduct research on the pros and cons of nuclear power. Summarize what you have learned, evaluating the credibility of sources.
- Write an evidence-based memo offering a recommendation about whether to support or oppose the plan, addressing both sides of the issue.
This morning you took the first SBAC field test. Use this space to record your first impressions.

I liked that it was on the computer.

What were some things that you noticed about the SBAC? What sticks in your mind about it?

The questions were longer than the CMT.

Think back to taking the CMT.

What did you find about the SBAC to be the same?

There were multiple choice questions in both tests.
What did you find to be different?
how we did the SBAC on the computer and we did the CMT with paper and pencil.

What was better?
we got to take breaks.

What was worse?
nothing.

What are three words that you would use to describe the SBAC you took today?
Long but fun.

This morning you took the first SBAC field test. Use this space to record your first impressions. The SBAC is very interesting because it's different than we are used to.

What were some things that you noticed about the SBAC? What sticks in your mind about it? That you could highlight things. Also, you can go back to change your answer.

Think back to taking the CMT.

What did you find about the SBAC to be the same?

The SBAC has 44 questions just like the CMT.

What did you find to be different?

The SBAC is on the computer and it features. The SBAC has much more features. You could do more things on the SBAC.

What was better?
It was on the computer.

What was worse?

What are three words that you would use to describe the SBAC you took today? Awesome, great, different.
4th Graders Meet SBAC

What Was Better?

“It was more interesting.”
“You could highlight things.”
“We could get up from our seats and we used computers.”
“You could do more things on the SBAC.” “It had more tools.”
“The paragraph I wrote.”
“It had just right questions and fun to work on.” “No filling in bubbles.”
“It was fast and I could take breaks”
“I could stand up and I could eat.”

What Was Worse?

“Nothing.” (Most common answer)
“It took a long time.”
“It was on the computer.”
“I had to type.”
“You had to do paragraphs”
What Three Words
Would you Use to Describe it?

- Easy, fun, flexible
- Awesome, great, different
- Better, just right, new
- Fun, important, educational
- I liked it.
- Fun, tiring, good
Knowledge, Skills, and Dispositions for Postsecondary Success
Assessment Continuum

Examples
- Traditional Tests
  - CCSS Assessments (SBAC & PARCC)
- Common Performance Tasks (Ohio, WA, NH)
- C-PAS College Ready Assessments
- Student-Designed Projects (Envision, NY Performance Standards Consortium, Singapore, IB)

Descriptions
- Narrow Assessment
  - Standardized tests with m-c & open-ended items + short (1-2 day) performance tasks of some applied skills
- Assessments of Deeper Learning
  - Standardized performance tasks (1-2 weeks) that include structured inquiry and demand more integrated skills, including collaboration
  - Performance tasks that require students to formulate and carry out their own inquiries, analyze & present findings, and (sometimes) revise in response to feedback
  - Longer, deeper investigations, (2-3 months) & exhibitions, including graduation portfolios, requiring students to initiate, design, conduct, analyze, revise, and present their work in multiple modalities
To Support College and Career Readiness, New Systems of Assessment Will Need to:

- Include rich, locally administered performance tasks as well as state tests/tasks that include performance elements.
- Connect to curriculum and instruction in ways that inform teaching and learning.
- Involve teachers in design, review, and scoring.
- Keep track of learning in many ways that support student agency and reflection and inform colleges and employers about abilities.
A Performance Assessment Task Bank: The Innovation Lab Network
Tasks that Assess Critical Abilities

- Research and analysis
- Experimentation and evaluation
- Written communication (reading, writing)
- Oral communication (speaking, listening)
- Use of technology
- Collaboration
- Modeling, design, and problem solving
Litchfield Promotions promotes bands and puts on performances in England. They need to be sure that each performance will make enough money to cover all the costs and make a profit. Many people need to be paid: the bands; sound engineers; and, lighting technicians. There is also the cost of hiring the venue.

Litchfield Promotions needs to create an ICT solution to ensure that they have all necessary information and that it is kept up to date. Their solution will show income, outgoings and profit.

Candidates need to:

1) Work with others to plan and carry out research to investigate how similar companies have produced a solution.
2) Clearly record and display your findings.
3) Recommend and evaluate a solution addressing the task requirements.
4) Produce a design brief explaining & critiquing your solution.
To Assess Experimental Skills and Investigations, Students…

- Identify a problem, design and plan an investigation, evaluate their methods and techniques
- Follow instructions and use techniques, apparatus and materials safely and effectively
- Make and record observations, measurements, methods, and techniques with precision and accuracy
- Interpret and evaluate observations and experimental data
Making Assessment Useful to Students: The Student Profile

- CCSS consortia test scores – by subject and claim
- Grade point average (cumulative and by subject)
- College Admissions tests (e.g., SAT, ACT)
- Graduation portfolio
  -- Social studies research paper
  -- Science investigation
  -- Mathematical modeling project
  -- Literary analysis
  -- Art exhibition
- Classroom-administered performance tasks
- Oral presentation / exhibition and scored discussion evaluation
- Teacher rating of student note-taking and collaboration skills
- Student self-report of aspirations and actions taken to achieve goals