Instructional Implications of the Common Core State Standards

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Overview

- What needs to change
  - Math
  - ELA/Literacy

- Suggested Action Steps for LEAs
Principles of the Standards

- Aligned to requirements for College and Career Readiness
- Based on evidence
- Honest about time

Principles of the Standards

- Fewer
- Clearer
- Higher
Mathematics: 3 shifts

1. **Focus**: Focus strongly where the standards focus.

2. **Coherence**: Think across grades, and link to major topics.

3. **Rigor**: Require fluency, application, and deep understanding.

Priorities in Mathematics

<table>
<thead>
<tr>
<th>Grade</th>
<th>Priorities in Support of Rich Instruction and Expectations of Fluency and Conceptual Understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>K–2</td>
<td>Addition and subtraction, measurement using whole number quantities</td>
</tr>
<tr>
<td>3–5</td>
<td>Multiplication and division of whole numbers and fractions</td>
</tr>
<tr>
<td>6</td>
<td>Ratios and proportional reasoning; early expressions and equations</td>
</tr>
<tr>
<td>7</td>
<td>Ratios and proportional reasoning; arithmetic of rational numbers</td>
</tr>
<tr>
<td>8</td>
<td>Linear algebra</td>
</tr>
</tbody>
</table>
Key Fluencies

<table>
<thead>
<tr>
<th>Grade</th>
<th>Required Fluency</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>Add/subtract within 5</td>
</tr>
<tr>
<td>1</td>
<td>Add/subtract within 10</td>
</tr>
<tr>
<td>2</td>
<td>Add/subtract within 20</td>
</tr>
<tr>
<td></td>
<td>Add/subtract within 100 (pencil and paper)</td>
</tr>
<tr>
<td>3</td>
<td>Multiply/divide within 100</td>
</tr>
<tr>
<td></td>
<td>Add/subtract within 1000</td>
</tr>
<tr>
<td>4</td>
<td>Add/subtract within 1,000,000</td>
</tr>
<tr>
<td>5</td>
<td>Multi-digit multiplication</td>
</tr>
<tr>
<td>6</td>
<td>Multi-digit division</td>
</tr>
<tr>
<td></td>
<td>Multi-digit decimal operations</td>
</tr>
<tr>
<td>7</td>
<td>Solve $px + q = r$, $p(x + q) = r$</td>
</tr>
<tr>
<td>8</td>
<td>Solve simple 2×2 systems by inspection</td>
</tr>
</tbody>
</table>

What can be done this year?

- Teachers are aware of and understand the shifts required to implement the Common Core Standards in mathematics.

- Teachers identify the major work for the grade.

- Teachers begin reviewing existing materials to prepare for focus.
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.

ELA/Literacy: 3 shifts

1. Regular practice with complex text and its academic vocabulary
2. Building knowledge through content-rich nonfiction and informational text
3. Reading and writing grounded in evidence from text
Text-Dependent or Not

- The novel *Sarah Plain and Tall* is a great book to illustrate what things were like in the past. There is also a movie based on the novel (created by Hallmark) which makes a good visual. If you like centers, you could put out a very simple pattern like an apron, or place mat and have the students trace, cut out and then sew (by hand) the item. Use fabric scraps and a needle and thread. My students said overwhelmingly "I can't imagine sewing all of my clothes like that!" I also have a wheat grinder, which the kids use to grind wheat into flour. We then use it to make scones from scratch later on. We made butter to go on the scones by putting cream and salt into a jar and shaking it for a very long time.

Text-Dependent or Not

- One of the things we do is create a simple suitcase out of paper. Inside students make illustrations of things they would take to a new place if they were Sarah. We also do some writing explaining their choices. Another thing I like to do with this book is get out my huge collection of shells. Students love looking at them and studying the different types -- a possible science connection.
Text-Dependent or Not

- Make bread
- Sew a quilt
- Write letters about themselves and their qualities
- Make a fold out of the prairie flowers and grasses and birds of the prairie
- Write a step poem about prairie

What can be done this year?

- Teachers are aware of and understand the shifts required to implement the Common Core Standards in ELA/Literacy.

- Teachers can identify, evaluate and develop text-dependent (evidentiary) questions.

- Teachers begin reviewing existing materials to develop text-dependent questions.
Advice to LEAs: You need numbers to make this happen!

<table>
<thead>
<tr>
<th></th>
<th>ELA/Literacy</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Materials and Instructional Resources</td>
<td>Reading lists are balanced</td>
<td>Materials are focused… ERASE!</td>
</tr>
<tr>
<td>Teacher Knowledge and Practice</td>
<td>80% of questions are text-dependent</td>
<td>Have a deep understanding of major work of the grade</td>
</tr>
<tr>
<td>Student Work</td>
<td>Demonstrate close encounters with text through writing</td>
<td>Demonstrate fluency and deep understanding of areas of focus</td>
</tr>
</tbody>
</table>

Assessment

- Strongest message you can send
  - **ELA/Literacy**
    - Informational passages
    - Writing to sources – not narrative, decontextualized prompts
  - **SBAC**
Strategies for Alignment

How are you spending:

◦ Money?
◦ Time?
◦ Energy?

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