Common Core Standards

What Do I Need to Know?

South Dakota

Department of Education
"If you try to introduce people to a paradigm shift, they will hear what you have to say and then interpret your words in terms of their old paradigm. What does not fit, they will not hear.

Therefore, a change in paradigm cannot be brought about by talking. People have to experience the change, or at a minimum see other people experiencing it, before they will begin to understand what you are saying."

(Myron Tribus - 2001)
Outcomes

• Gain knowledge of SD professional development plan

• Think about what my district transition plan should include

• Understand what I need to know about the Common Core State Standards as a leader in my district
The standards define the knowledge and skills students should have so they will graduate from high school ready to succeed in postsecondary education and careers.

K-12 Standards

• Mathematics
• English Language Arts
South Dakota’s Vision

Provide educators with a systemic model to implement the Common Core within a learning environment rich in collaboration, communication, creativity and critical thinking.
Timeline

2011-2012: Professional Development

2012-2013: Professional Development

2013-2014: Professional Development

2014-2015: New CCSS Assessment
South Dakota Focus

• Provide professional development opportunity focusing on a framework and process to:
  
  – Gain an awareness of the focus standards.

  – Learn a process to develop deep understanding of the focused standards

  – Learn a process to take standards from written words on paper to action in the classroom
*Although facilitated by the teacher, these steps must be taken by the learner. To maximize the assimilation of the raw data, it is essential that the teacher allows adequate time for the learner to process his/her way through the stages.
What the PD is:

- **Voluntary** for educators to participate not mandated by the state
- **Districts** make the **decision** on who to send not the state
- Districts will decide how to **implement** not prescribe one method of implementation
- **Jump-start** to district level **conversation and training** to implement the CCSS
- Combination of **online and face to face workshops**
- **Process** not an event or finished product
## Focus Standards for Each Year

<table>
<thead>
<tr>
<th>Year 1</th>
<th>2011-2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>K-12 ELA Strands</strong></td>
<td></td>
</tr>
<tr>
<td>• Reading for Literature</td>
<td></td>
</tr>
<tr>
<td>• Reading for Information Text</td>
<td></td>
</tr>
<tr>
<td><strong>Standards for Mathematical Practices</strong></td>
<td></td>
</tr>
<tr>
<td><strong>K-5 Math Domains</strong></td>
<td></td>
</tr>
<tr>
<td>• Counting and Cardinality</td>
<td></td>
</tr>
<tr>
<td>• Number &amp; Operations Base 10</td>
<td></td>
</tr>
<tr>
<td>• Operations-Algebraic</td>
<td></td>
</tr>
<tr>
<td><strong>6-8 Math Domains</strong></td>
<td></td>
</tr>
<tr>
<td>• Number Systems</td>
<td></td>
</tr>
<tr>
<td>• Expressions &amp; Equations</td>
<td></td>
</tr>
<tr>
<td><strong>HS Math</strong></td>
<td></td>
</tr>
<tr>
<td>• Algebra I</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>2012-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>K-12 ELA Strands</strong></td>
<td></td>
</tr>
<tr>
<td>• Reading Foundations</td>
<td></td>
</tr>
<tr>
<td>• Writing</td>
<td></td>
</tr>
<tr>
<td><strong>Standards for Mathematical Practices</strong></td>
<td></td>
</tr>
<tr>
<td><strong>K-5 Math Domains</strong></td>
<td></td>
</tr>
<tr>
<td>• Number Operations-Fractions</td>
<td></td>
</tr>
<tr>
<td>• Geometry</td>
<td></td>
</tr>
<tr>
<td><strong>6-8 Math Domains</strong></td>
<td></td>
</tr>
<tr>
<td>• Ratios-Proportional Relationships</td>
<td></td>
</tr>
<tr>
<td>• Functions</td>
<td></td>
</tr>
<tr>
<td>• Geometry</td>
<td></td>
</tr>
<tr>
<td><strong>HS Math</strong></td>
<td></td>
</tr>
<tr>
<td>• Geometry</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>2013-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>K-12 ELA Strands</strong></td>
<td></td>
</tr>
<tr>
<td>• Language</td>
<td></td>
</tr>
<tr>
<td>• Listening, Speaking</td>
<td></td>
</tr>
<tr>
<td><strong>Standards for Mathematical Practices</strong></td>
<td></td>
</tr>
<tr>
<td><strong>K-5 Math Domains</strong></td>
<td></td>
</tr>
<tr>
<td>• Measurement &amp; Data</td>
<td></td>
</tr>
<tr>
<td><strong>6-8 Math Domains</strong></td>
<td></td>
</tr>
<tr>
<td>• Statistics – Probability</td>
<td></td>
</tr>
<tr>
<td><strong>HS Math</strong></td>
<td></td>
</tr>
<tr>
<td>• Algebra II and Statistics</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
</tr>
</tbody>
</table>
| **D-STEP** covers current SD standards  
- Districts would receive the same accountability report as usual | **D-STEP** covers current SD standards  
- Districts would receive the same accountability report as usual | **D-STEP** covers current SD standards  
- Districts would receive the same accountability report as usual | **D-STEP** covers current SD standards  
- Districts would receive the same accountability report as usual | New Common Core Assessment |
| **Common Core Field Test Questions**  
- Implement 20 questions for each content area based on focus standards  
- District would receive an additional report based on common core field test questions  
- Items are not part of AYP | **Common Core Field Test Questions**  
- Implement 40 questions for each content area based on focus standards  
- District would receive an additional report based on common core field test questions  
- Items are not part of AYP | **Common Core Field Test Questions**  
- Implement 40 questions for each content area based on focus standards  
- District would receive an additional report based on common core field test questions  
- Items are not part of AYP | | | |
Professional Development Plan

• Must attend all three phases
• Earn 3 credits
• Three locations: Aberdeen, Rapid City, Sioux Falls
• 150 seats for K-6 teachers each location
• 75 seats for grades 6-8 ELA teachers each location
• 75 seats for grades 6-8 Math teachers each location
• 75 seats for grades 9-12 ELA teachers each location
• 75 seats for Algebra teachers each location
The Common Core Standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that young people need for success in college and careers.

2011-12 Common Core Professional Development Plan

REGISTRATION - Deadline: Sept. 2, 2011
- Common Core PD Year 1 Series
- Common Core Memorandum of Understanding
- Substitute Application
Reactions from Pilot

- Reductive Elimination
- Oxidative Addition
- Metathetic Exchange
- cis/trans Isomerization
- Transmetalation
Questions About PD
Investigating CCSS
K-5 Math Comparison

SD Math Strands

- Algebra
- Geometry
- Measurement
- Number Sense
- Statistics & Probability

CCSS Math Domains

- Counting & Cardinality
- Operations & Algebraic Thinking (K-5)
- Number & Operations Based Ten (K-5)
- Number & Operations – Fractions (3-5)
- Measurement & Data (K-5)
- Geometry (K-HS)
6-8 Math Comparison

SD Math Strands

• Algebra
• Geometry
• Measurement
• Number Sense
• Statistics & Probability

CCSS Math Domains

• The Number System (6-8)
• Ratios-Proportional Relationships (6-7)
• Expressions & Equations (6-8)
• Functions (8-HS)
• Geometry (K-HS)
• Statistics-Probability (6-HS)
High School Math Comparison

SD Math Strands

- Algebra
- Geometry
- Measurement
- Number Sense
- Statistics & Probability

CCSS Math Domains

- The Number Quality
- Algebra
- Functions
- Geometry (K-HS)
- Statistics-Probability (6-HS)
- Modeling (standard for Mathematical Practice)
Math Standards

• The 8 Standards for Mathematical Practice are a key part of the Common Core Math Standards
• Many standards being taught at younger grades in CCSS compared to current SD Standards
  • Linear connectivity across the grade span highly emphasized
  • College and Career Readiness
  • There are still some concepts that are at the same grade level
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.
# Fractions!!!!

<table>
<thead>
<tr>
<th>Current State Standards have operations with fractions in 7&lt;sup&gt;th&lt;/sup&gt; grade</th>
<th>Common Core State Standards have students performing operations with fractions in 5&lt;sup&gt;th&lt;/sup&gt; grade</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7.N.2.1.</strong></td>
<td><strong>5.NF 1-7</strong></td>
</tr>
<tr>
<td>• Students are able to add, subtract, multiply, and divide integers and positive fractions.</td>
<td>• Use equivalent fractions as a strategy to add and subtract fractions.</td>
</tr>
<tr>
<td></td>
<td>• Apply and extend previous understandings of multiplication and division to multiply and divide fractions.</td>
</tr>
</tbody>
</table>
Current SD Standard

8.G.1.2. (Application)
Given any two sides of an illustrated right triangle, use the Pythagorean Theorem to find the third side.

Common Core State Standard

Understand and apply the Pythagorean Theorem. 8.G 6-8

6. Explain a proof of the Pythagorean Theorem and its converse.
7. Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.
8. Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.
Current SD Standards begin exploring likelihood (probability) as early as 2nd grade and classifying likelihood beyond certain or impossible in 5th grade:

- 2.S.2.1. (Application) List possible outcomes of a simple event and make predictions about which outcome is more or less likely to occur
- 5.S.2.1. (Application) Classify probability of simple events as certain, likely, unlikely, or impossible.

Common Core Standard:
7SP 5-7 Investigate chance processes and develop, use, and evaluate probability models.
Common Core Math Standards

Focus

- More with concepts and understanding.

Focus

- Less emphasis on basic procedures
ELA Comparison

SD ELA Strands

• Reading
  – Word Recognition
  – Fluency
  – Text structures, literary devices and literary elements
    – Diverse/Multicultural texts
    – Informational Texts
• Writing
  - Applying the writing process to compose text
  - Standard English conventions
• Listening, Viewing, Speaking
  - Communication
    - Retrieval
    - Interpretation
    - Evaluation

CCSS ELA Strands

• Literature
• Informational Text
• Reading Foundations (K-5)
• Writing
• Speaking Listening
• Language
College and Career Readiness is a responsibility for all grades:

- CC.K-12.R.R.1 – Key Ideas and Details: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
Conceptual Understanding

• Deeper understanding over time.
• Stress conceptual understanding in K-5 (Reading Foundations)
• Example
  – CC.K.R.F.1 (excellent) – Print Concepts: Demonstrate understanding of the organization and basic features of print.
  – CC.5.R.F.3 (good) – Phonics and Word Recognition: Know and apply grade-level phonics and word analysis skills in decoding words.
Demonstrating Understanding

- Interacting and Responding to Text
  - Appropriate Reading Level
    - Appendix A
  - Building Academic Vocabulary
  - Text-Based Answers to Clarifying Questions
  - Writing from Sources
    - Inferences and Arguments
Literacy is integrated into all content areas through Standards for Reading and Writing in History/Social Studies, Science, and Technical Subjects.
• Language strand is pulled out to provide a focus on Standard English Conventions
• Balance with Literature or Informational Texts
  – Fiction and Non-Fiction
<table>
<thead>
<tr>
<th>Grade/Grade Band</th>
<th>Totals</th>
<th>Reading for Literature (RL)</th>
<th>Reading for Informational Text (RI)</th>
<th>Reading for Foundational Skills (RF)</th>
<th>Writing (W)</th>
<th>Speaking and Listening (SL)</th>
<th>Language (L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>72</td>
<td>9</td>
<td>10</td>
<td>17</td>
<td>7</td>
<td>8</td>
<td>21</td>
</tr>
<tr>
<td>Grade 1</td>
<td>81</td>
<td>9</td>
<td>10</td>
<td>19</td>
<td>7</td>
<td>9</td>
<td>27</td>
</tr>
<tr>
<td>Grade 2</td>
<td>71</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>7</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td>Grade 3</td>
<td>90</td>
<td>9</td>
<td>10</td>
<td>9</td>
<td>21</td>
<td>10</td>
<td>31</td>
</tr>
<tr>
<td>Grade 4</td>
<td>87</td>
<td>9</td>
<td>10</td>
<td>6</td>
<td>26</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td>Grade 5</td>
<td>85</td>
<td>9</td>
<td>10</td>
<td>6</td>
<td>26</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>Grade 6</td>
<td>79</td>
<td>9</td>
<td>10</td>
<td>N/A</td>
<td>28</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>Grade 7</td>
<td>76</td>
<td>9</td>
<td>10</td>
<td>N/A</td>
<td>28</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td>Grade 8</td>
<td>78</td>
<td>9</td>
<td>10</td>
<td>N/A</td>
<td>28</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>Grade 9-10</td>
<td>115</td>
<td>9</td>
<td>10</td>
<td>N/A</td>
<td>28</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Grade 11-12</td>
<td>113</td>
<td>9</td>
<td>10</td>
<td>N/A</td>
<td>28</td>
<td>10</td>
<td>17</td>
</tr>
</tbody>
</table>
SD & CCSS Connections

Math
- 29%
- 71%

ELA
- 20%
- 80%
Looking Below the Surface
Questions About Standards
District Transition Plan

• What will your teachers engage in over the next four years to prepare?

• Key points to consider in plan
  – Time
  – Gaining a deep understanding of the standards
  – Curriculum: Review & Map
  – Vertical Alignment
  – Revising units/lessons/assignment/formative assessments
Questions to Ask Your Teachers

- Does this standard contain content you already cover in its entirety or does the standard contain additional content?
- Is the Cognitive Complexity aligned to what you teach, similar, slightly different, or very different?
- What questions do you have about the standard?
- Are there new CC standards that you are not familiar with?
- Has there been a shift of content from one grade level to another?
- What type of additional resources may you need to teach the standard?
• Account of both the content and instructional design of the materials.

• Carefully examine how well a material’s content aligns with each standard and how well the instructional strategies in the student text and teacher guide can support students’ learning of this content.
### Example

<table>
<thead>
<tr>
<th>Text Book or Curriculum Resource</th>
<th>Text Book or Curriculum Resource</th>
<th>Text Book or Curriculum Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Align to content of standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote higher order thinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variety of Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Include Real World application &amp; 21st Century Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developmentally Appropriate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Rating Scale:** poor, fair, satisfactory, very good
Additional Possible Criteria

- Relate to the students’ every day experiences
- Appeal equally to boys and girls and to those of all cultural and religious backgrounds
- Involve the students in working co-operatively and in combining their ideas
- Involve the pupils in first-hand investigation of materials
- Require them to be self-critical and open to others’ ideas
- Involve resources which are readily available

- OTHERS?????
Planning for Instruction & Assessment

- Purposeful planning
- Teaching & learning aligned to cognitive demand of standard
- Ensures all standards are covered
- Provides clear picture of practices & strategies
- Leads to co-curricular teaching
- Fulfills Accreditation requirements
### Sample District Transition Plan

<table>
<thead>
<tr>
<th>School Year</th>
<th>District Plan</th>
</tr>
</thead>
</table>
| 2011-2012   | - Attend state sponsored professional development  
- During school year **meet monthly** to disaggregate **focus** standards & review curriculum  
- Summer of 2012: review results of field test items & start to create units (curriculum planning) |
| 2012-2013   | - Attend state sponsored professional development  
- Continue to develop units & implement as they are developed  
- Summer of 2013: review results of field test items & continue development of units |
| 2013-2014   | - Full implementation of all standards  
- Summer of 2014: review results of field test items |
| 2014-2015   | - 2nd year, full implementation of all standards  
- Standards Assessed in Spring 2015 |
## Sample Transition Plan

<table>
<thead>
<tr>
<th></th>
<th>2011-2012</th>
<th>2012-2013</th>
<th>2013-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Understanding</strong></td>
<td>Attend state sponsored professional development</td>
<td>Attend state sponsored professional development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>During school year <strong>meet monthly</strong> to disaggregate focus standards &amp; review curriculum</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Curriculum &amp; Instruction</strong></td>
<td>Review curriculum resources</td>
<td><strong>Meet monthly to develop units &amp; implement</strong></td>
<td><strong>Meet monthly to develop units &amp; implement</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teach to Standards</td>
<td>Teach to Standards</td>
</tr>
<tr>
<td><strong>Assessment</strong></td>
<td>Summer of 2012: <strong>review results of field test items</strong></td>
<td>Summer of 2013: <strong>review results of field test items</strong></td>
<td>Summer of 2014: <strong>review results of field test items</strong></td>
</tr>
</tbody>
</table>
## Sample District Transition Plan

<table>
<thead>
<tr>
<th>School Year</th>
<th>District Plan</th>
</tr>
</thead>
</table>
| 2011-2012     | - Attend state sponsored professional development  
- During school year **meet biweekly** to **disaggregate all standards**  
- Start to identify within current curriculum plans/maps where CC standards may fit in  
- Summer of 2012: review results of field test items |
| 2012-2013     | - Continue to teach SD Standards  
- Start to develop units based on CC  
- Summer of 2013: review results of field test items |
| 2013-2014     | - Continue to develop unit  
- Implement CC standards and units  
- Summer of 2014: review results of field test items |
| 2014-2015     | - **2nd year**, full implementation of all standards  
- Standards Assessed in Spring 2015 |
"If you try to introduce people to a paradigm shift, they will hear what you have to say and then interpret your words in terms of their old paradigm. What does not fit, they will not hear.

Therefore, a change in paradigm cannot be brought about by talking. People have to experience the change, or at a minimum see other people experiencing it, before they will begin to understand what you are saying."

(Myron Tribus - 2001)
<table>
<thead>
<tr>
<th>Hall 2</th>
<th>Rooms 8+9+10</th>
<th>Rooms 11+12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[STUDENT ACHIEVEMENT]</td>
<td>[STUDENT ACHIEVEMENT]</td>
</tr>
<tr>
<td></td>
<td>Danielson Framework</td>
<td>Establishing Professional Networks</td>
</tr>
<tr>
<td></td>
<td>Past, Present and Future of Student Assessments</td>
<td>Filling Crucial Gaps in Curriculum Offerings</td>
</tr>
<tr>
<td></td>
<td>Personal Learning Plans: High Quality Learning</td>
<td>Link Between Student Health and Achievement</td>
</tr>
</tbody>
</table>

Want to know more about Assessment?
Kindergarten students enrolled this fall will be assessed on common core state standards in 2015.
Questions

Curriculum Team Leader: Becky Nelson
- Becky.nelson@state.sd.us
- 773-4681

ELA Program Specialist: Marta Stirling
- Marta.stirling@state.sd.us
- 773-4662

Math Program Specialist: William Kliche
- William.kliche@state.sd.us
- 773-8196

Assessment Director: Gay Pickner
- Gay.pickner@state.sd.us
- 773-3247