Common Formative Assessments, Performance Tasks, and the Common Core State Standards

Cathy J. Lassiter, Ed.D. and Brandon Doubek, Ed.D.
Session Objectives

- Discuss the current work of the national assessment consortiums
- Review assessment types and terms
- Practice using the Common Core spirals as a tool for assessment development and alignment for rigor and mastery
- Examine methods to use the CCSS spirals to maximize Teacher Based Teams and/or PLCs
The National Assessment Scene
STATES IN THE PARTNERSHIP FOR ASSESSMENT OF READINESS FOR COLLEGE AND CAREERS

Governing Board States

Participating States
PARCC Assessment Design

• Include a mix of:
  – Constructed response
  – Performance-based tasks
  – Computer-enhanced & scored items

• Administered on computer

• Automated as well as human scoring
SMARTER Balanced

• Designed to provide valid, reliable, and fair measures of student progress toward attainment of the knowledge and skills required to be college and career ready

• Comprehensive accountability measures that include computer adaptive assessments and performance tasks, administered the last 12 weeks of the school year in grades 3-8 and high school
### PARCC Timeline

- **2010-11**
  - Member states approve common policies & procedures
- **2011-12**
  - Item development & piloting
- **2012-14**
  - Field testing
- **2014-2015**
  - Summative assessments in use
- **Summer 2015**
  - Setting achievement standards

### SBAC Timeline

- **2011**
  - Develop formative tools, processes & practices
- **2012**
  - Item development completed & interim items available for use
- **2013**
  - Field testing
- **2014**
  - Achievement standards proposed, policies adopted
- **2015**
  - Summative assessments operational & achievement standards adopted
The CCSS Starting Line
Fordham Institute Analysis ELA, 2010

Key

X States not yet adopted
?
ELA Standards “clearly inferior”
to the ELA Common Core
Key:

- States not yet adopted
- Math Standards “clearly inferior” to the Common Core
The “Spiral Effect” metaphor relates to the ascending level of difficulty embedded in the content of each succeeding grade-specific standard as it approaches the CCR Anchor Standard.
As students move along the plane of a particular learning trajectory they study the same expectation each year at ever increasing increments of complexity and sophistication.
How to assess?
Assessment Types

• Formative (as and for learning) vs. summative (of learning)
Assessment for Learning
Assessment for Learning
Assessment Of Learning
Assessment of Learning
Assessment for Learning
Assessment of Learning
Assessment for Learning
Assessment Of Learning
Learning Activity
Assessment Terms

• Selected response
• Constructed response
• Performance based
Formative assessment is capable of triggering big boosts to students’ achievement – the educational equivalent to the cure for the common cold.

James Popham, 2010
Strategic Priorities for School Improvement, Harvard Education Letter, No. 6
Common Core Assessment Activity 1

The sample:

1. Read through the spiraled standards for CCR Reading Anchor Standard 8
2. Analyze standard RI.6.8 as it relates to the whole picture
3. Review the completed sample assessment development template
4. Discuss at your tables
• **Assessment Activity 2**
  – Analyze the entire spiral for CCR Anchor Standard 9
  – Select a grade-level standard and complete the assessment development template
  – Refer to the previous sample template
Skills and concepts are reinforced and expanded as students advance through the grades.
The oldest method:

1. What is the next chapter in the book?
2. How much content do I need to cover?
3. How will I teach this content or skill?

“Teach, test, hope for the best.”
Connecting Data to Learning

Shifting from teacher centered to student centered in standards based education, the new method:

1. What should my students know and be able to do? (curriculum)
2. How do I get them there? (instruction)
3. What if that doesn’t work? (revised instruction and rti)
4. What if they already know this or may have trouble learning it? (differentiation)
5. How will I know they “got it”? (assessment)
Connecting Data to Learning

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5. How will I know they “got it”? (data)
Connecting Data to Learning

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1. What should my students know and be able to do?
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4. What if they already know this or may have trouble learning it? (data)
5. How will I know they “got it”? (data)
The Best (Most Useful) Data Should be Connected to Feedback
Importance of Feedback
Visible Learning

Students could have achieved w/o schooling

What teachers accomplish in a typical year

The greatest impact on student achievement outcomes
Feedback: Teacher & Student

0.73 Effect Size

Rank 10th Overall and 4th in the Teaching Domain
Feedback is the most powerful when it is from the *student to the teacher*. “When teachers seek . . . feedback from students as to what the students know, what they understand, where they make errors, when they have misconceptions, when they are not engaged – then teaching and learning can be synchronized and powerful.”
Effective feedback fills the gap between what is understood and what is aimed to be understood.

The more challenging the task the more critically feedback is needed.
Feedback: 
Teacher & Student

The major feedback questions are:

- Where am I going? (learning goals)
- How am I going? (self-assessment & self-evaluation)
- Where to next? (progression, new goal)
Why Do Teachers Assess?

- To set education goals and standards
- To evaluate teaching
- To provide instructional feedback to students
- To grade student achievement
- To evaluate curriculum
- To identify student education needs
Types of Assessments

• Formative Simple (informal)
  ✓ No paper, pen, pencil; not for a grade

• Formative Complex (formal)
  ✓ Uses paper, pen, pencil; not for a grade

*(most typical Common Formative Assessment, or CFA)*
Types of Assessments

• Summative Simple (informal)
  ✓ Smaller test (e.g., chapter test); for a grade

• Summative Complex (formal)
  ✓ Larger test (e.g., unit, midterm or final exam, high stakes state tests); for a grade or evaluation of cumulative information
The Category of Assessment Least Used but Equally Important for Successful Learning:

Assessment AS Learning
Assessment AS Learning

- Self-Reflections of Learning
  - Today I worked on…
  - It was difficult to…
  - I really enjoyed…
  - If I could change one thing given more time,…
  - It would help me if…..

- Strengths, Needs, Attitudes, Preferences
- Multiple Intelligences
What data are teachers in your building or district currently collecting?

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<td>45%</td>
<td>15%</td>
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<td>3%</td>
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<tr>
<td>Better</td>
<td>15%</td>
<td>15%</td>
<td>10%</td>
<td>15%</td>
<td>15%</td>
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Ungraded

Graded

Simple Formative
- No paper/pen
- Observation
- Discussion

Complex Formative
- PRETEST
- POSTTEST
- Short Cycle
- Collaboratively created and scored
- Posttest shows growth before getting a grade

Simple Summative
- Quiz
- End of Section
- Chapter Test
- Vocabulary Test
- Math Review Quiz

Complex Summative
- End of Unit
- End of Course
- Final Exam
- State Test
- ACT/SAT/AP/IB
- Performance Assessment

Observe
Concrete Feedback

Assessment Ladder
Bloom’s Cognitive Taxonomy

BEFORE

BACKGROUND

Relevance

DURING

Knowing

Applying

Understanding

ANALYZING

EVALUATING

Creating

AFTER

Teaching
Using Bloom’s Taxonomy and Gardner’s Multiple Intelligences for Entry into Learning Progressions
Performance Assessment

Task 1
- Recognize
- List
- Describe

Task 2
- Interpret
- Summarize
- Infer

Task 3
- Implement
- Compare
- Deconstruct

Task 4
- Design
- Estimate
- Judge

Priority Standards

“Unwrapped” Concepts and Skills

Whole and Small-Group Instruction throughout Tasks 1-4

Increase in Rigor/Difficulty
Advance in Levels of Bloom’s Taxonomy
Incorporate Nonfiction Writing

Engaging Scenario

Adapted from Diana Greene, Deputy Superintendent, Marion County, FL
5th Grade

Number Sense – Engaging Scenario
Imagine a group of Aliens have just arrived on Earth from Beiberland and you are the first to greet them. They have come to Earth to learn about different numerical systems. In Beiberland they use a Base Three (Ternary system). They have brought with them a guide of this system and want you to create a corresponding guide to explain the United State’s base ten system. They need it to be detailed enough so that others on Beiberland can understand the essential elements of the Base Ten system to determine if this system will replace their current system.
S,C,R,A,P:

- Situation: Aliens land on Earth
- Challenge: To explain and convince them about our Base Ten system
- Role: Alien Greeter
- Audience: “Aliens”
- Product: Brochure that Aliens could take back to their world
Tasks:

- **Task 1:** Explain how numbers, value of decimals, and powers of 10 work (2)

- **Task 2:** Show how our system is used by interpreting numerical expressions (3)

- **Task 3:** Compare both systems by analyzing patterns and relationships (4)

- **Task 4:** Convince the Aliens that the Base 10 system is the most effective one to use (5)
Operations and Algebraic Thinking
• Write and interpret numerical expressions.
• Analyze patterns and relationships.

Number and Operations in Base Ten
• Understand the place value system.
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.
4. Gardner’s Multiple Intelligences:

- verbal – through presentation
- intrapersonal – group project
- spatial – creating book
- logical – mathematical
- technology - brochure
Number System on Beiberland

Why we want to change our system.
Representations of integer numbers in ternary do not get uncomfortably lengthy as quickly as in binary. For example, decimal 366 corresponds to binary 101101101 (9 digits) and to ternary 1111112 (6 digits). However, they are still far less compact than the corresponding representations in bases such as decimal.

What we need from you is

List of Basic Numbers:

| Base Three | 1 | 2 | 10 | 11 | 12 | 20 | 21 | 22 | 100 | 101 | 102 | 1000 | 1001 | 1002 | 1010 | 1011 | 1012 | 1020 | 1021 | 1022 | 1100 |
|------------|---|---|----|----|----|----|----|----|-----|-----|-----|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
| Base Ten   |   |   |    |    |    |    |    |    |     |     |     |      |      |      |      |     |     |     |     |     |     |     |

Value of decimal/patterns

Powers of Three/Ten

<table>
<thead>
<tr>
<th>Base Three</th>
<th>$3^0 = 1$</th>
<th>$3^1 = 3$</th>
<th>$3^2 = 9$</th>
<th>$3^3 = 27$</th>
<th>$3^4 = 81$</th>
<th>$3^5 = 243$</th>
<th>$3^6 = 729$</th>
<th>$3^7 = 2187$</th>
<th>$3^8 = 6561$</th>
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<tbody>
<tr>
<td>Base Ten</td>
<td>$10^0 = 1$</td>
<td>$10^1 = 10$</td>
<td>$10^2 = 100$</td>
<td>$10^3 = 1000$</td>
<td>$10^4 = 10000$</td>
<td>$10^5 = 100000$</td>
<td>$10^6 = 1000000$</td>
<td>$10^7 = 10000000$</td>
<td>$10^8 = 100000000$</td>
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Patterns when multiplying/dividing by powers of ten

Rounding

Comparing

The benefit of our Base Three System:

Why we have this system:

What is the purpose of the zero in the Base Three System:
Maximizing TBTs and BLTs Data Processes

1. Collect & chart data
2. Analyze strengths & needs Draw inferences
3. Set SMART goals
4. Agree on instructional strategies
5. Determine adult & student result indicators
6. Monitor & Evaluate Outcomes
Step 1: Collect & Chart the Data

- Data is assembled prior to the meeting
- Results include names of students at multiple performance levels
- Data is disaggregated by teacher
- Data includes student work samples
Step 2: Analyze to Prioritize

- Student academic strengths and needs are determined from the data
- Accurate inferences are drawn to get at root causes
- Academic priorities are determined from the list of needs for multiple groups of students
Step 3: Establish SMART Goals

• Goal is based on the prioritized need from Step 2
• Goal is SMART:
  – Specific
  – Measurable
  – Achievable
  – Relevant
  – Time frame
Step 4: Select Instructional Strategies

• Strategies directly link to the goal and the prioritized needs
• All teachers agree to implement the strategy as prescribed in the meeting
• Strategies are determined for each performance group
• Steps for implementation, frequency, duration, and resources are clear
Step 5: Determine Results Indicators

- Indicators describe what the teacher will be doing if the strategy is being implemented
- Indicators describe what the students will be doing
- Indicators describe the anticipated change in student performance if the strategy is having the desired effect
Learning Activity
The one true purpose of educational assessment is to correctly determine student understanding of the standards in focus and then to use those assessment results to inform, modify, adjust, enrich, and differentiate instruction to meet the learning needs of all students.  Larry Ainsworth
Visit our online store at www.LeadandLearn.com/books to check out our new releases, end-of-year clearance items, and other special offers!
Questions and Discussion

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