Performance Assessment: The Core of Competency Based Learning

Rose Colby Iowa ASCD June, 2015
Goal:

Competency requires that learners show what they know. High quality performance tasks with accompanying assessments provide the venue for clear indicators of proficiency and mastery of competency. This session is designed to gain an overview of a continuum of assessment tasks that can be used in building a high quality competency assessment system.
What is the purpose of assessment?

It is to determine the level of mastery of defined competency.
Complexity of Assessment Tasks

- Simple
- Complex
- Project Based Learning
- Extended Learning Opportunity
- Capstone
What is competency?

Competency is a student’s ability to TRANSFER content and skills in/across content areas.
The new CBE framework:

**Competency based**
- Articulated across K-12
- A continuum of learning progressions based on standards
- Validated competencies
- Mapped across K-12 pathway

**Performance Assessment**
- Performance based
- Rubrics designed with ‘Competent’ designated at Strategic thinking (DoK 3)
- Projects ARE the learning
- Formative Assessment triggers relearning; summative assessment when ready
- Multiple and varied assessments inform evaluation of ‘competent’

**Learning Pathways**
- Guided by Personal Learning Plan
- Systemic resources support differentiation
- Blended and online supports for content and skill acquisition
- Project-Based Learning/Studios augment rigor in learning

**Dynamic Grading**
- Teacher practice guided by a Grading Philosophy statement
- Summative performance assessment scoring is the grade
- Relearn/reassess without penalty
- ‘Set point’ for ‘Competent’ consistent with task rubric designs
Competency Statements
• Graduation/Course/Grade Level
  Competencies

Performance Indicators
• Tuned to Depth of Knowledge

Performance Tasks
• Assessed using rubrics

College and Career Ready Skills K-12 scale
SIMPLE TASK:

• CHECKLIST ITEM
• FORMATIVE TASK
• CHECK FOR UNDERSTANDING
• TRACKED NOT GRADED
• STEPPING STONE FOR MASTERY
• LOW DEPTH OF KNOWLEDGE
• COMPLETION NOT AS IMPORTANT AS PERFORMANCE
COMPLEX TASK:

- 1. multi step, prolonged single performance
- 2. multiple measurements of proficiency with rubrics
- 3. launched before the learning--just in time
- 4. learning tasks are unpacked from task and assessed separately with attention to DoK
Depth of Knowledge
Performance Task Activity:

Performance Task Directions:

**Activity**
Working together in your group, please **design a performance task** for the following competency for middle school age science.

“**Students will demonstrate the ability to use evidence to support claims about the relationship among structure and function of natural and human designed objects.**”

**One person from each group will share out the design.**
Learning design

It is important to design the learning to the cognitive rigor demanded by assessment consortia—PARCC, SBAC
## Common Core – Math/Math Practices

<table>
<thead>
<tr>
<th>Depth + Thinking</th>
<th>Level 1 Recall &amp; Reproduction</th>
<th>Level 2 Skills &amp; Concepts</th>
<th>Level 3 Strategic Thinking/Reasoning</th>
<th>Level 4 Extended Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Remember</strong></td>
<td>Know math terms; fluency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Understand</strong></td>
<td>Attend to precision</td>
<td>Model with mathematics</td>
<td>Construct viable arguments</td>
<td>Integrate concepts across domains</td>
</tr>
<tr>
<td></td>
<td>Evaluate expressions</td>
<td>Estimate</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Apply</strong></td>
<td>Calculate, measure, make</td>
<td>Make sense of routine</td>
<td>Make sense of non-routine problems;</td>
<td>Design &amp; conduct a</td>
</tr>
<tr>
<td></td>
<td>conversions</td>
<td>problems</td>
<td>real-world contexts</td>
<td>project or investigation</td>
</tr>
<tr>
<td></td>
<td>Apply rules</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Analyze</strong></td>
<td>Use appropriate tools</td>
<td>Classify, organize data,</td>
<td>Reason abstractly</td>
<td>Analyze multiple</td>
</tr>
<tr>
<td></td>
<td></td>
<td>extend patterns</td>
<td></td>
<td>sources of evidence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use tools strategically</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Evaluate</strong></td>
<td></td>
<td></td>
<td>Critique the reasoning of others</td>
<td></td>
</tr>
<tr>
<td><strong>Create</strong></td>
<td></td>
<td>Devise a strategy or</td>
<td>Design a complex model or alternative</td>
<td>Design a complex model integrating concepts</td>
</tr>
</tbody>
</table>
MATH LEARNING TARGET: Make sense of non-routine problems; real-world contexts

COMPLEX TASK: Aggie sells eggs. Last Saturday she sold Beneva half her eggs plus half an egg. Then she sold Calvin half of her remaining eggs plus half an egg. Then she sold Davida half of her remaining eggs plus half an egg. Then she sold the remaining 27 eggs to you. How many eggs did Aggie start with?
Designing a performance task:

- Validation
- Calibration of rubric
- Administer the task
- Recalibrate
• GIVEN A NON-ROUTINE PROBLEM AT GRADE LEVEL, UNPACK THE PROBLEM THROUGH BRAINSTORMING. (ASSESS SKILLS IF NECESSARY)
• INDEPENDENT WORK: EACH STUDENT WORKS ON SOLVING PROBLEM, WRITING THE STEPS HE/SHE HAS USED IN SOLVING THE PROBLEM
• TEACHER CHECK OF INDEPENDENT WORK
• WHEN READY, STUDENTS WORK IN PAIRS TO DEFEND THEIR SOLUTION.
• EACH PAIR OF STUDENTS CREATES A GRAPHIC ORGANIZER OF THEIR BEST SOLUTION TO THE PROBLEM
• CAROUSEL PRESENTATION OF PROBLEM SOLUTION

Checking:  Aggie started with 223 eggs, Beneva bought 112 eggs, Calvin bought 56 eggs, and Davida bought 28 eggs, leaving Aggie with 27 eggs.
Project or problem based learning

• THE PROJECT IS THE LEARNING!
• Student choice and voice in product and presentation
• Linked to competencies, CCSS standards
• Performance indicators declared
You are a member of Big Island Pond’s Milfoil Management Committee. You and your team are responsible for making a presentation to the lake residents to communicate your findings and recommendations for managing the presence of milfoil in the lake. Your efforts to control this invasive will contribute to the preservation and protection of the lake.
“HIGH QUALITY ASSESSMENT IS AT THE HEART OF COMPETENCY BASED LEARNING. MOVING TEACHERS BEYOND BOILER-PLATE ASSESSMENTS THAT ARE GIVEN WITHOUT THOUGHT TO LINKAGES TO STRATEGIC THINKING ARE A WASTE OF VALUABLE LEARNING TIME FOR STUDENTS.

IMMERSING TEACHERS IN QUALITY PROFESSIONAL DEVELOPMENT AROUND PERFORMANCE ASSESSMENT ALLOWS THEM TO QUESTION THE AMOUNT OF LEARNING TIME GIVEN OVER TO MEANINGLESS ASSESSMENT AND THE LOW QUALITY OF THE ASSESSMENTS. “

ROSE COLBY
Questions? Comments?

ROSE COLBY

Email: rosecolby@comcast.net
Phone: 603.498.2376