Using Performance Assessment to Launch Students and Teachers Toward the Next Generation of Student Assessment

Council of Chief State School Officers (CCSSO)
National Conference on Student Assessment (NCSA)
New Orleans, LA
June 26, 2014
Using Performance Assessment to Launch Students and Teachers Toward the Next Generation of Student Assessment

**Moderator:** Michael J. Richards, Measured Progress

**Presenters:** Jennifer Briggs, Massachusetts Department of Education
Mary Beth Myers, Measured Progress
Lauren Monowar-Jones, Ohio Department of Education
Susan Tierney, Measured Progress

**Discussant:** Doug Sovde, PARCC, Inc.
The Use of Standardized Tests

AH HA! YOU DON'T FIT THE STANDARD! THAT PROVES THAT PUBLIC EDUCATION IS A FAILURE!
Testing

Why is everyone so stressed out over testing???
From Policy to Implementation - THEN

NCLB
(No Child Left Behind), 2001
• Each state created its own assessment program using its own academic standards (ELA and Mathematics)
  • MA has MCAS
  • OH has OAA and OGT

While these two states’ programs have been very successful, NCLB as a whole is perceived to have resulted in an over-emphasis on multiple choice and assessing *recall* of knowledge instead of application of knowledge, such as with performance assessment.
What is a performance assessment?

- Accomplish a task
  - Explain
  - Generate
  - Solve
  - Converse
  - Conduct
- “Authentic”
- Prevalent in 1980s and 1990s
- Universal application
Why do we need performance assessments?

Economy-Wide Measures of Routine and Nonroutine Task Input, 1960–2002

Mean Task Input in Percentiles of 1960 Task Distribution


Nonroutine Analytic
Nonroutine Interactive
Nonroutine Manual
Nonroutine Cognitive
Routine Cognitive
Routine Manual

From Policy to Implementation - NOW

CCSS (Common Core State Standards), 2013
• Common standards for all states (ELA and Mathematics)
• Two national consortia formed with many states joining:
  • PARCC (Partnership for Assessment of Readiness for College and Careers)
  • Smarter Balanced (Smarter Balanced Assessment Consortium)
• Some states remained independent

NGSS (Next Generation Science Standards), 2013
• Each state chooses to adopt, in part or as a whole
• Eleven states so far (CA, DE, KS, KY, MD, RI, VT, WA, NV, IL, OR) – and DC

In both cases, the focus is on applying your knowledge at deeper levels of understanding
# Fast Facts: MPAKS and OPAPP

<table>
<thead>
<tr>
<th>Facts</th>
<th>MPAKS</th>
<th>OPAPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timeframe of Project Assessment Stage</td>
<td>2012–2015</td>
<td>2008-2014</td>
</tr>
<tr>
<td>Funding Source</td>
<td>Mainly RTTT</td>
<td>Exclusively RTTT</td>
</tr>
<tr>
<td>Number of Teachers</td>
<td>54 teachers (maximum)</td>
<td>450 teachers</td>
</tr>
<tr>
<td>Number of Students</td>
<td>2,060 students (maximum)</td>
<td>22,500 students</td>
</tr>
<tr>
<td>Grade Levels</td>
<td>Elementary Middle School High School</td>
<td>Elementary High School</td>
</tr>
<tr>
<td>Content Areas</td>
<td>ELA Mathematics Science History/Social Studies</td>
<td>ELA Mathematics Science History/Social Studies Career and Technical Pathways</td>
</tr>
<tr>
<td>Key Components</td>
<td>Grade 2 Assessments Scoring involvement Development model</td>
<td>Dyad Model Teacher Involvement Online Delivery</td>
</tr>
</tbody>
</table>
Presenter

Jennifer Briggs
Massachusetts Department of Education

Massachusetts Performance Assessment of Knowledge and Skills (MPAKS)
What is MPAKS?

A performance assessment consisting of a series of activities including both group work and individual work.

- Allows students to dive deeply into topic
- Elicits high-level thinking skills
- Results in multiple, individually-produced, scorable products
Goal of MPAKS

• To create positive, meaningful assessment experiences for both students and educators.
• To reach test takers with different strengths through a variety of assessment methods.
• To measure the progress and capabilities of students in different ways.
Why now?

- Expanding upon traditional assessments
- Preparing for realistic work environment
Where are we?

MPAKS is here.
## Current Focus

<table>
<thead>
<tr>
<th>Grade/Grade Level</th>
<th>English Language Arts</th>
<th>Mathematics</th>
<th>Science and Technology/Engineering</th>
<th>History and Social Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>X</td>
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<td>5</td>
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<tr>
<td>7</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td></td>
<td></td>
<td>Biology Physics Technology/Engineering</td>
<td>U.S. History I</td>
</tr>
</tbody>
</table>
Demonstration

What is the probability that the fifth coin flip will be heads?
# Example – Grade 7 Mathematics

<table>
<thead>
<tr>
<th>Task</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 1    | Step #1: Complete vocabulary handout.  
       | Step #2: Review answers.               |
|      | Step #3: Demonstrate a game of chance. |
|      | Step #4: Design a game.                |
|      | Step #5: Discuss game ideas.           |
|      | Step #6: Explain your game.            |
| 2    | Step #1: Demonstrate your game.        |
|      | Step #2: Play your partner's game.     |
### Example – Grade 7 Mathematics (continued)

<table>
<thead>
<tr>
<th>Task</th>
<th>Targeted Standards</th>
</tr>
</thead>
</table>
| 1    | • Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. (7.SP.8)  
• Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. (7.NS.1) |
| 2    | • Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. (7.NS.2)  
• Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (W.4) |
Questions?

Jennifer Briggs
Massachusetts Department of Education

Massachusetts Performance Assessment of Knowledge and Skills (MPAKS)
Presenter

Mary Beth Myers
Measured Progress

Massachusetts Performance Assessment of Knowledge and Skills (MPAKS)
Preparing to Launch

- Connection to curriculum and standards
- Manageability of administration
- Accuracy and efficiency of scoring student responses
What makes MPAKS different?

- The people
- The process
### MPAKS Advisory Committees

<table>
<thead>
<tr>
<th>Committees</th>
<th>Performance-based Assessment Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>1. Grade 2 ELA</td>
</tr>
<tr>
<td></td>
<td>2. Grade 2 Mathematics</td>
</tr>
<tr>
<td>Science and Technology/Engineering</td>
<td>1. Grade 4 STE</td>
</tr>
<tr>
<td></td>
<td>2. Grade 7 STE</td>
</tr>
<tr>
<td></td>
<td>3. High School Biology</td>
</tr>
<tr>
<td></td>
<td>4. High School Physics</td>
</tr>
<tr>
<td></td>
<td>5. High School Technology/Engineering</td>
</tr>
<tr>
<td>History and Social Sciences</td>
<td>1. Grade 4 HSS</td>
</tr>
<tr>
<td></td>
<td>2. High School US History I</td>
</tr>
</tbody>
</table>
Assessment Development Sequence

1. Identify standards & create specifications
2. Write assessment
3. Review assessment
4. Revise assessment
5. Administer assessment
6. Review student responses
7. Review assessment post-tryout

KEY:
- Event
- Deliverable or created document
- Main Process
Advisory Committee Activities

START

Identify standards & create specifications

Brainstorm ideas

Educators

Write assessment

Review assessment

Revise assessment

Administer assessment

Review student responses

END

KEY

Event

Deliverable or created document

Main Process
The MPAKS Launch Crew

Performance Assessment Specialist

ELA Content (and Scoring) Specialist

STE Content (and Scoring) Specialists

Mathematics Content (and Scoring) Specialist

HSS Content (and Scoring) Specialist
Scoring Activities

1. Identify standards & create specifications
2. Brainstorm ideas
3. Write assessment
4. Review assessment
5. Revise assessment
6. Administer assessment
7. Scoring
8. Review student responses
9. Review assessment post-tryout

**KEY**
- Event
- Deliverable or created document
- Main Process
## Content Rubrics

### 2-point Content Rubric

<table>
<thead>
<tr>
<th>Score</th>
<th>A Complete Response</th>
<th>A Partial Response</th>
<th>A “No Credit” Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>addresses all components of the task.</td>
<td>addresses most components of the task.</td>
<td>does not sufficiently address the components of the task.</td>
</tr>
<tr>
<td></td>
<td>demonstrates clear and complete understanding of the concepts involved.</td>
<td>demonstrates partial understanding of the concepts involved.</td>
<td>demonstrates little-to-no understanding of the concepts involved.</td>
</tr>
<tr>
<td></td>
<td>includes information that is accurate, relevant and specific.</td>
<td>includes information that is generally correct and relevant (may have some omissions or errors).</td>
<td>includes insufficient information (e.g., completely incorrect/irrelevant, primarily illegible in a language other than English).</td>
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### 4-point Content Rubric

<table>
<thead>
<tr>
<th>Score</th>
<th>A Thorough Response</th>
<th>A General Response</th>
<th>A Partial Response</th>
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<tbody>
<tr>
<td>4</td>
<td>addresses all components of the task.</td>
<td>addresses all or almost all components of the task.</td>
<td>addresses some components of the task.</td>
<td>addresses few components of the task.</td>
<td>does not sufficiently address the components of the task.</td>
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<tr>
<td></td>
<td>demonstrates clear and complete understanding of the concepts involved.</td>
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<tbody>
<tr>
<td>0</td>
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Scoring Activities
# Example – Grade 7 Mathematics

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      | Step #5: Discuss game ideas.  
      | Step #6: Explain your game. |
| 2    | Step #1: Demonstrate your game.  
      | Step #2: Play your partner's game. |
## Grade 7 Mathematics Sample Revisited

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
<th>Number of Points</th>
<th>On what basis is it scored?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step #6:</strong> Explain your game.</td>
<td>Working independently, students answer questions about the game the teacher demonstrated.</td>
<td>10</td>
<td>4 - Content, 2 - Writing, 4 - Accuracy</td>
</tr>
<tr>
<td></td>
<td>Working independently, students explain their game by answering questions on the handout.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What have we learned?

- Heterogeneous composition of advisory committees works.
- Development takes dedication and flexibility.
- Scoring experts need to be involved early and remain involved throughout the process.
What’s Next?

• Another small-scale tryout
• Distributed scoring pilot
• Post-tryout meetings
Questions?

Mary Beth Myers
Measured Progress

Massachusetts Performance Assessment of Knowledge and Skills (MPAKS)
Presenter

Lauren Monowar-Jones
Ohio Department of Education

Ohio Performance Assessment Pilot Project (OPAPP)
Dyad Model
PARCC and OPAPP

Learning Task

Assessment Task

Standards

Instruction

Practice

Assessment

Observations

Opportunity to learn

OPTIONAL

Diagnostic Assessment

MYA

PBA

EOY
Overview

**Prof Learning**
- Formative Instructional Techniques, Feedback and Re-engagement

**Pilot**
- Learning Task
- Assessment Task

**Score**
- Assessment Task
- Look-back

**Prof Learning**
- Write Learning Task
Professional Learning
Teachers Talking

How has OPAPP changed your teaching?
Questions?

Lauren Monowar-Jones
Ohio Department of Education

Ohio Performance Assessment Pilot Project (OPAPP)

education.ohio.gov/opapp
Presenter
Susan Tierney
Measured Progress
Ohio Performance Assessment Pilot Project (OPAPP)
OPAPP

Notes from the development perspective...
Performance Assessments

WORKSHEETS
LECTURES

PERFORMANCE
Performance Assessments - Dyad Model

✓ Embed opportunities for assessment of performance into curriculum
✓ Provide opportunities for formative assessment and decision-making
✓ Practice on skills not easily assessed using paper-pencil tests
✓ Provide an opportunity for assessment on skills after practice
Life Cycles (Elementary Science)

Directions
Session 1: Life Cycles

Activity 1: Plants and Animals
You will learn about the life cycle of several organisms. Look at the pictures and videos about these organisms. After reviewing these organisms on the computer, you will talk about the life cycle of organisms as a class and answer some questions.

Before You Begin:
In the Website windows, you may need to click “play” to view each video. If some of the videos start to play right away, scroll down until you are ready to view them.

Monarch Butterfly
1. What is the life cycle of a monarch butterfly? Click “Start Slideshow” in the Website below to find out.

2. Watch a movie about the life cycle of a monarch butterfly.

Like all butterflies, the Monarch’s life cycle
Life Cycles (Elementary Science)

SESSION 1
- Pre-assess
- Engage
- Activate prior knowledge

SESSION 2

SESSION 3
Life Cycles (Elementary Science)

SESSION 1
• Pre-assess
• Engage
• Activate prior knowledge

SESSION 2
• Conduct scaffolded investigation

SESSION 3
Life Cycles (Elementary Science)

Question 1
Write a question that guides this investigation.

Question 2
What is kept the same during this investigation? Be sure to explain your thinking.

Question 3
Is it better to use 1 seed or 10 seeds during this investigation? Be sure to explain your thinking.

Question 4
Make a prediction. Write what you think will happen to the seeds kept in the dark and the seeds kept in the light. Be sure to explain your thinking.
Life Cycles (Elementary Science)

SESSION 1
- Pre-assess
- Engage
- Activate prior knowledge

SESSION 2
- Conduct scaffolded investigation

SESSION 3
- Share observations and results
- Construct conclusion
- Analyze results
Life Cycles (Elementary Science)

SESSION 1
- Pre-assess
- Engage
- Activate prior knowledge

SESSION 2
- Conduct scaffolded, hands on investigation

SESSION 3
- Share results
- Construct conclusion
- Analyze results
Life Cycles (Elementary Science)

**LEARNING TASK**

- **SESSION 1**
- **SESSION 2**
- **SESSION 3**

**ASSESSMENT TASK**

- Similar skills and content
- Demonstration of mastery
Student Responses Life Cycles Assessment Task

Question 1
Think about things you have learned about life cycles. What are two big ideas about life cycles that you could use to plan this investigation?
In a life cycle it can start all over again.
In a life cycle a plant, animal, human, or insect has to grow.

Question 2
List five things you need to do this experiment.
You need a place that is hot, a place that is cold, seeds, water, and a bag for when there little seeds.
Student Responses Life Cycles Assessment Task

Question 3
List two things you should keep the same in the plan.
You should keep the water in both bags the same, and you need to keep the seeds the same.

Question 4
Explain why it is important for you to keep these things the same in the plan.
So the seeds could at least grow a little bit alike.
Question 5

You decide to use 10 seeds for each temperature tested. Explain why this is better than using just one seed.

It is better to use 10 seeds than 1 because if you only use 1 seed it might die but if you use 10 you have way more chances.
ASSESSMENT TASKS

FACT

RECALL

DEMONSTRATE SKILLS
“Hi!! I just finished Task 1 about life cycles with my class at the computer lab. We had a fun time and I heard students saying this is fun!!! The sentences that they typed were wonderful!!! Thanks for all you are doing for this.”

~3rd grade Teacher, Liberty Union
Teacher Task Training

- Consisted of:
  - Instruction on specifications, templates, rubrics, and on-line authoring
  - Small group discussions
  - Teacher work sessions

- Resources:
  - Task specifications
  - Task templates
  - Example rubrics
  - Peer feedback
Teacher Task Training

• What worked
  ◦ Having time to work on tasks
  ◦ Having opportunity to collaborate

• What didn’t work as well
  ◦ Following-up after the workshops ended
  ◦ Providing feedback via email
Challenges for Teachers Writing Tasks

- Many teachers reverted back to what they had always done
  - **Science**
    - Lack of inquiry
    - Lack of scientific process skills
  - **Math**
    - Lack of incorporating practices
    - Not letting go of algorithms
Challenges for Teachers Writing Tasks (continued)

❖ **ELA**
  - Lack of submissions or too few submissions
  - Lack of informational text inclusion

❖ **Social Studies**
  - Lack of skills identified or used
  - Lack of opportunity for students to make choices
Questions?

Susan Tierney
Measured Progress

Ohio Performance Assessment Pilot Project (OPAPP)
Discussant

Doug Sovde
PARCC, Inc.

Using Performance Assessment to Launch Students and Teachers Toward the Next Generation of Student Assessment
THANK YOU

Questions?

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