Primary Science Assessments

February 28, 2018

Agenda

- Outcomes
- Compelling why
- Vertical progression
- UbD: Six Facets of Understanding
- Let's make some assessments!



Outcomes

- Teachers will be able to articulate at least two reasons why we have to restructure our science assessments in primary grades.
- Teachers will see the progression of the standards taught in each grade level.
- Teachers will review/learn the six facets of understanding as a platform for generating assessments meeting the essential criteria.
- Teachers will start creating assessments for their upcoming science unit using the assessment ideas chart.



Why are we here?

- VDOE feedback
- Academic Review and Reconstitution Action Plan alignment issues
- Benchmark Test results
- VDOE Quarterly Reports



VDOE Feedback, Academic Review

VDOE Feedback

- Jefferson Houston Elementary audit → William Ramsay Elementary audit
- Inquiry-based activities with assessment measures embedded
- Completely aligned with **VDOE Framework** (at or extension of standard)

Academic Review

- Internal audit of lesson plans in science
- VDOE alignment rubric

Benchmark Results

	Grade 3 (3.1, 3.2, 3.3)	Gr 3 Q1 Science Benchmark Proficiency	Grade 4 (4.1, 4.2, 4.3)	Gr 4 Q1 Science Benchmark Proficiency	Grade 5 (5.1, 5.2, 5.3, 5.4)	Gr 5 Q1 Science Benchmark Proficiency
Kinder Standards	K.1, K.2, K.3 K.4, K.5	3 students proficient	K.1, K.2, K.3	29 students proficient	K.1, K.2, K.3, K.4, K.5	35 students proficient
Gr 1 Standards	1.1, 1.2, 1.3	students not proficient	1.1, 1.2	77 students not proficient	1.1, 1.2, 1.3	students not proficient
Gr 2 Standards	2.1, 2.2, 2.3		2.1, 2.2		2.1, 2.2, 2.3	

Vertical Progression Activity

Today we will highlight the progression of our grade level standards through 5th grade. We will determine the importance of our instruction on future grades.



Understanding by Design

Evidence of Understanding

Basic logic of the first two stages of backward design in UbD:

- 1. What are the desired results?
- 2. If those are the desired results, what follows for assessment?

UbD's answer → **Transfer!**



Misconception Alert!!



1. The six facets are listed in a hierarchy, like Bloom's Taxonomy.

Not so. The six facets of understanding were conceived as six equal and hopefully suggestive indicators of understanding and thus are used to develop or select assessment tasks and prompts. **They were never intended to be a hierarchy.**

2. We must use all six facets when assessing understanding.

No. Designers should select the appropriate facet or facets depending on the nature of the content and the desired understandings about it. For example, interpretation and empathy are the appropriate facets to use in assessing students' understanding of a novel, whereas application and explanation fit naturally in mathematics.

Essential Components of Assessments

Assessments should be...

- 1. Developmentally appropriate
- 2. Aligned to the Curriculum Framework
- 3. Teacher-friendly for administering, evaluating, and using for reteaching

Think embedded. Think checklists. Think observation data. Think investigation data.

