How do we create exams that measure what students can do?

Special Faculty Meeting Dec 4, 2014

Since the standards are about what students can do independently...

We need to ensure that the intent of the standard and the level of students' tasks

matches the assessment of the student performance

DOK: Depth of Knowledge

- Recall/Reproduction Recall a fact, information, or procedure; process information on a low level
- Skill/Concept Use information or conceptual knowledge, two or more steps
- Strategic Thinking Requires reasoning, developing a plan or a sequence of steps, more than one reasonable approach
- Extended Thinking Requires connections and extensions, high cognitive demands and complex reasoning

Let's look at DOK in practice

DOK video/Social Studies Example:

http://vimeo.com/42788913

It is not about the verb...

Webb's Depth of
Knowledge is about the
cognitive demands
(thinking process) of
instruction, tasks, and/or
assessments.

While **Bloom's Taxonomy** relies on the verb, **Webb's DOK** extends beyond the verb to what follows---beyond the 'what' to the 'how'.

Here's an example...

The verb "Create," for example, is a high level on Bloom's taxonomy.

But if you ask students to "create a model of the human eye based on a textbook model," students may not need additional background knowledge to complete the task. There is little transfer of knowledge and little cognitive engagement.

DOK-What comes after the verb...

- **Describe** three characteristics of metamorphic rocks
 - (requires simple recall)
- <u>Describe</u> the difference between metamorphic and igneous rocks.
 - (requires cognitive processing to determine the differences in the two rock types)
- **Describe** a model that you might use to represent the relationships that exist within the rock cycle.
 - (requires deep understanding of the rock cycle and a determination of how best to represent it)

Let's look at some sample questions to determine the DOK:

- At your table group, discuss what DOK level each sample exam question is.
- Which questions will provide evidence of what students can do independently?
- Think about how questions support or are aligned to Common Core and/or your content standards.

Self-assess your own exam:

Steps:

- 1. Annotate each question for DOK 1-4.
- 2. How many level 1 questions? How many level 2 questions? How many level 3? level 4?
- 3. Next, align/annotate each question to a standard.
- 4. Are there standards you are assessing multiple times? Standards you are never assessing?

We are not going to live in DOK 4, but we do not want to live in DOK 1.

What can your exams look like?

- ★ Think outside the box:
 - Socratic Seminars
 - Debates
 - Lab Practical
 - StudentPresentations
 - MusicalCompositions

★ Think about performance tasks that ask students to apply what they have learned in new ways.

Next Steps:

Revised Rigorous Exam Checklist

- 1. Assess and revise exams.
- 2. Ensure common exams are common.
- 3. Complete the revised "rigorous exam checklist."
- 4. Submit all exams and the completed checklist to your CA and Administrator before Christmas Recess.
 - World Language & English Dept: Michele
 - Social Studies: Dan
 - Science, Math & Tech. Ed.: Liz
 - all other depts: Neil

Final Thoughts

"The quality of a question is not judged by its complexity but by the complexity of thinking it provokes."

-Joseph O'Connor