

Going Deeper With DOK

Kelly Cornelius & Karen Harris

TIMEBOMB

The Cost of Dropping Out



**YOUR KIDS
NEED YOU
NOW MORE
THAN EVER!!**

MIKE MATTOS

Today's purpose is to....

help teachers adopt practices that will assist students in making a cognitive leap imperative to meeting the demands of our state standards.



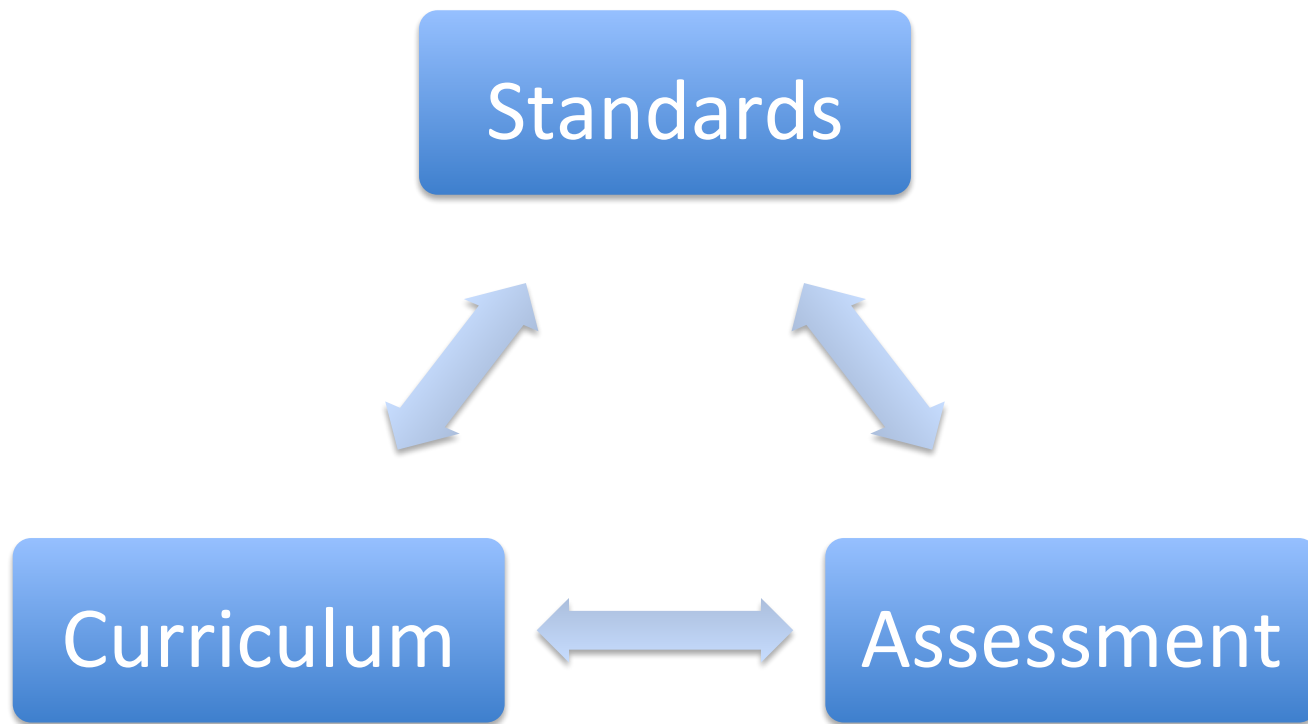
Meet Norm

**Dr. Norman L. Webb
Senior Research Scientist**

**Wisconsin Center for
Education Research ,
University of
Wisconsin-Madison**



Why DOK was born?



“**Alignment** is the degree to which expectations, curriculum, and assessments are in agreement and serve in conjunction with one another to guide the system toward students learning what is expected.” (Webb,1997)

DOK Level 1:

Recall and Reproduction

- Requires **recall of information**, such as a fact, definition, term, or performance of a simple process or procedure
- Answering a level 1 item can involve following a simple, well known procedure or formula

DOK Level 1



Just the facts!

DOK Level 2:

Skills & Concepts

- Includes the engagement of some mental processing **beyond recall or reproducing a response**
- Items require students to make some decisions as to how to approach the question or problem
- Actions imply more than one **mental or cognitive process/step**



DOK Level 2



the
PRICE
is
Right



TOP | CHEF

Why are DOK levels 1 & 2 Valuable?



Scan pages 9, 10, 12, 14 and identify key points concerning the importance of DOK 1 & 2.

DOK Level 3:

Strategic Thinking

- Requires **deep understanding** exhibited through planning, using evidence, and more demanding **cognitive** reasoning.
- The cognitive demands are **complex and abstract**
- An **assessment item** that has more than one possible answer and requires students to **justify the response**



DOK Level 3



DOK Level 4: *Extended Thinking*

- Requires high cognitive demand and is very complex
- Students are expected to **make connections, relate ideas** within the content or among content areas, and select or devise one approach among many alternatives on how the situation can be solved
- Due to the complexity of cognitive demand, DOK 4 often requires **an extended period of time.**

DOK Level 4



Extending the length of an activity does not necessarily create rigor!

<i>Task</i>	<i>Thinking</i>
Collecting data samples over several months	Recall
Organizing the data in a chart	Skills/ concepts
Using this chart to make and justify predictions	Strategic Thinking
Developing a generalized model from this data and applying it to a new situation	Extending Thinking

Why teach DOK 3 & 4?

Read pages 15-17 in the text.

Why should we teach DOK

3 & 4?



Why teach DOK 3 & 4?

Does this look familiar?



It's not about the verbs!

DOK 1- Student will identify essential information needed to accomplish a task.

DOK 2- Students will identify information in a passage that is supported by a fact.

DOK 3- Students will identify the appropriateness of an argument using supporting evidence.

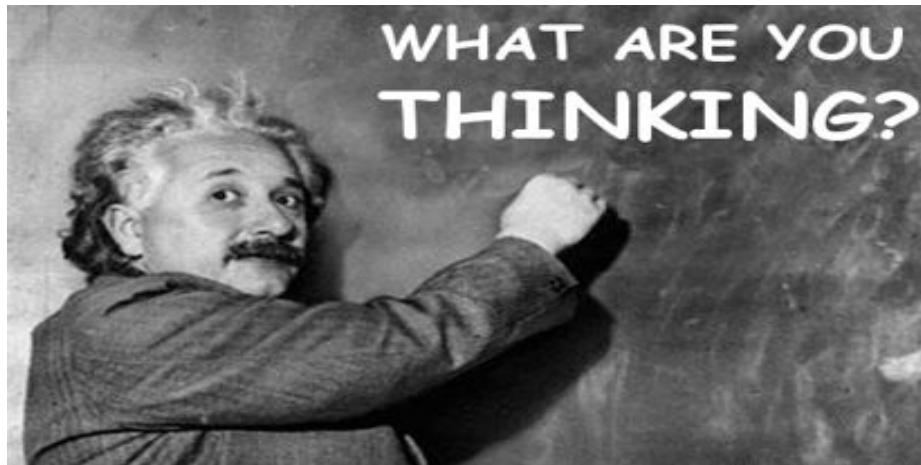
DOK 4 - Students will identify interrelationships (themes, ideas, concepts) developed in one or more literary work.

What is Cognitive Rigor?



What is Cognitive Rigor?

Activity: Take a minute to jot down 2-3 words/phrases that come mind when you think of “cognitive rigor” as it relates to instruction, learning, and/or assessment.



Cognitive Rigor Is...

- Making connections
- Applying what you've learned to new situations
- Challenge with “just right” support
- (Sometimes) Higher- order thinking: analyzing, evaluating, and creating
- Engagement, collaboration, and discourse
- Triggered by asking a different kind of question

Low-Road Hugging



High-Road Bridging



Visible learning in Literacy- Fisher, Frey & Hattie

Hugging and Bridging Methods for Low-Road and High-Road Transfer

Hugging to Promote Low-Road Transfer <i>Students are learning to apply skills and knowledge.</i>	Bridging to Promote High-Road Transfer <i>Students are learning to make links across concepts.</i>
The teacher is associating prior knowledge with new knowledge.	Students are using analogies and metaphors to illustrate connections across disciplines and contents.
Students are categorizing information.	Students are deriving rules and principles based on examples.
The teacher is modeling and thinking aloud.	Students are thinking metacognitively and reflectively to plan and organize.
Students are summarizing and rehearsing knowledge.	Students are creating new and original content.
The teacher creates role-play and simulation opportunities for students to apply new knowledge to parallel situations.	Students are applying new knowledge to dissimilar situations.

Why Rigor Matters...

Rigor matters because it imposes cognitive load on students, forcing them to confront misconceptions, reconsider positions, separate the implicit from the explicit, and other critical thinking practices that distinguish shaky familiarity from true understanding.

Common Misconceptions about Rigor

What surprises you?

What is validated in your own practice?

What new questions have been raised?

How Can Teachers Add Rigor?

Develop a set of best practices for promoting academic excellence through rigor in the classroom.

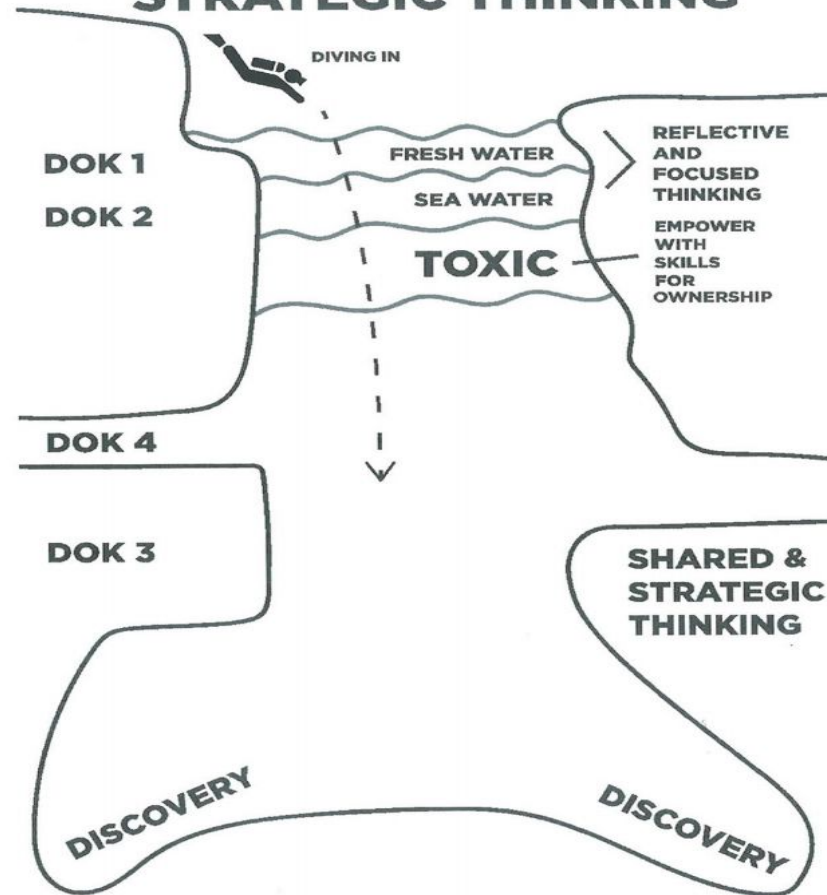
Best Practices...

- Writing (journals, varied levels of writing, writing across the curriculum, etc.)
- Problem-solving (case studies, group activities, essay exams, etc.)
- Oral communication (debates w/expert judges, summary presentations, role playing)
- Reading/comprehension (reading and analyzing – ie. in class discussion, quizzes, summaries, etc)
- Collaborative group projects

Best Practices...

- In-class small group discussion and report findings (think-pair-share)
- Socratic method/interactive discussion
- Knowing your students (contact, interaction, showing interest, meeting w/students)
- Providing a detailed, clear lesson plan with student objectives; grading rubrics, calendar, etc.
- Class size - use technology to enhance efficiency of content delivery, engage students

DIVING INTO DOK 3 STRATEGIC THINKING



1. Does the image of a diver exploring the depths give you a clearer understanding of the goals of DOK?

2. Look at the location of the DOK 4 label on the diagram on the previous page. Why do you think DOK 4 is placed in the horizontally extending passageways of the caves?

What are some things that prevent you from breaking through the toxic layer and reaching DOK 3 & 4 in your classroom?



Reflective Thinking

Focused Thinking

Shared Thinking

Part 1 Takeaways



CURRENT



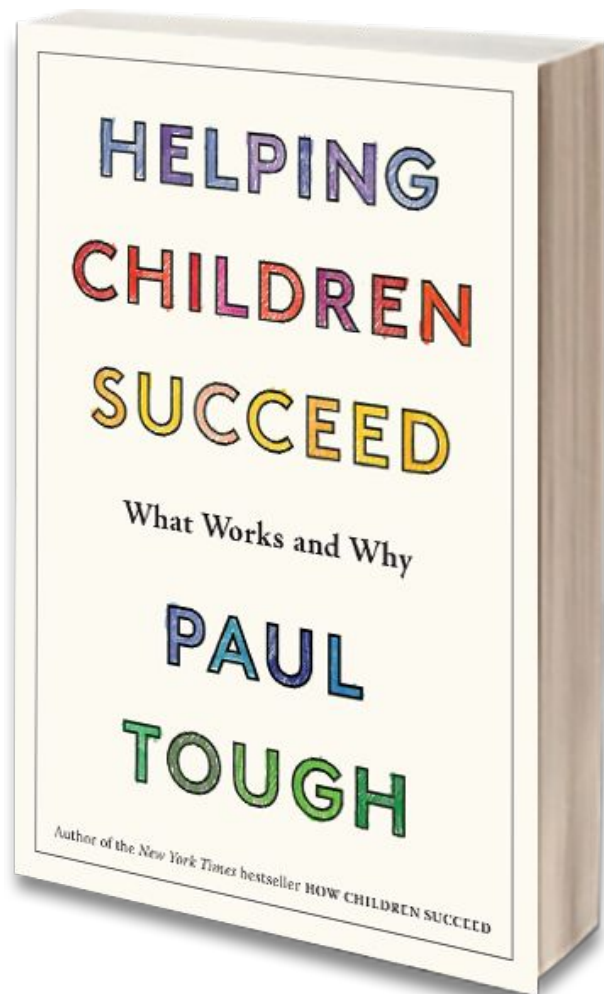
**YOU ARE
HERE**

REALITY

The Intentional Classroom



Paul Tough Video



What's Happening in Your Classroom?

- Who does most of the talking in whole-class parts of the lesson?
- What questions do I ask?
- Who answers the questions?
- How well do I listen to the students' answers and seek to understand what they are saying?
- What do I do with the students' answers?
- How do I facilitate the learning?
- How confident are the students to take a risk, to try out ideas, to make mistakes?
- What does my body language communicate?

Table 2
Characteristics of dialogic and monologic stances

Dialogic	Monologic
<p>The teacher...</p> <ul style="list-style-type: none"> • has a sincere interest in students' ideas and interpretations. • believes that students can offer valid perspectives about texts that he or she has not thought of. • is willing to reconsider his or her own thinking about a text in light of conversations with students. • offers students many opportunities to engage in exploratory talk. • may use authentic, open-ended questions and follow-ups that probe students' thinking (but need not use this kind of talk exclusively). • offers think time and encourages students to allow one another time to think. • focuses talk around students' thinking. • supports students in learning to listen to one another and build on one another's ideas. • engages students in high-level, critically constructive talk about big ideas within and across texts. 	<p>The teacher...</p> <ul style="list-style-type: none"> • emphasizes correct answers and conventional interpretations of texts. • focuses on delivering knowledge to students rather than helping them construct it. • may not offer many opportunities for student-to-student talk or may structure that talk around identifying correct answers. • may use initiation–response–evaluation/initiation–response–feedback recitation sequences. • may not focus instructional attention on helping students learn to talk productively with one another. • engages students in conversations about texts that involve literal recall and low-level inferences.

Actions to Eliminate Toxic Barriers

- Identify standards by DOK levels
- Adjust for complexity
- Grant autonomy
- Leverage feedback
- Focus on process over outcome
- Embrace failure



Identify Your Standards by DOK Level

Example

RL.9-10.4 Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; Analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).

Identify Your Standards by DOK Level

Practice

RL.9-10.2 Examine a grade-appropriate literary text.

- Provide an objective summary.
- Determine a theme of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details.

Next Steps



Adjust for Complexity

- Spiral Complexity
 - “Move between the four levels of thinking to ensure that you activate all levels of thought and achieve wholeness in learning.”
- Plan for a Multi-Step Approach
 - Reflective Thinking
 - Focused Thinking
 - Shared Thinking
- Text Complexity
 - Relationships
 - Richness
 - Structure
 - Style
 - Vocabulary
 - Purpose

Multi-Step Lesson

"New information needs incubation time, so break complex thinking lessons into parts to allow time for coming back up to the surface to reflect between reading texts." (p. 59)



*Give student models,
not blueprints!*

Leverage Peer Feedback

“Develop a culture for critique and descriptive feedback.”

1. BE KIND, BE SPECIFIC, BE HELPFUL
2. Choose work models that connect to learning targets
3. Provide a structured protocol or format for critiquing work

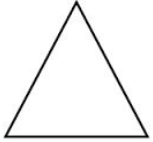


Productive failure is at
the heart of strategic
thinking.

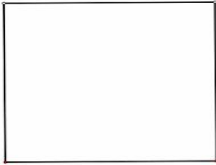
Test your DOK Level IQ



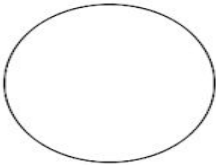
Reflection



Write down 3 Important points from today's learning.



Write down anything from today's learning that "squares" with your thinking.



Write down anything from today's learning that is still "circling" around in your head.