The Teacher, CCSS, Depth of Knowledge, and IAR Connection

Online-Self-Paced 2023

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Macon Piatt ROE 39

2023

This Training

- Please make sure that you have registered at https://www.maconpiattroe.org/ on the ABC sign up registration site.

- **This training requires answers to TASKS that are inside the training. They will always be in RED so not to miss them.** These need to be sent back to me prestonb@roe39.org   Please send them in a ppt. form or a WORD document. No GOOGLE DOCS or One Drives.

- Please view all slides and videos embedded in the training.

- If you need support, please email me. Thank you.

Task One -Pre/Post Test for Depth of Knowledge, CCSS, and PARCC 2023---Online Training

The following statements related to the targets of this training session. Please indicate your comfort level with the following:

4 = I am confident in my knowledge

3 = I am on the right track

2 = I am not sure I am doing it right or with the right amount of consistency

1 = I need more information in this area

Copy the pre and post tests and send to me with all of your tasks.

DOK, CCSS, PARCC Statements	Pre	Post
I understand that my Teaching, DOK, CCSS, and IAR connect. Using them to differentiate for students and support students makes sense.		
I can identify how Webb's Depth of Knowledge and Bloom's Taxonomy work together for deeper questioning.		
I can identify students who need leveled questions to feel successful throughout their learning and I can identify students who are beyond the learning and need extensions.		
I can locate resources to support my efforts in assessment, asking leveled questions, changing a lesson if needed, differentiating when needed, and reflecting on what is working and what is not.		
I am able to provide students with instruction on how to find evidence to support their answers and why that is so important to critical thinking and critical reading.		
I am aware of the connection Standards, DOK, and IAR have in common. I know there is a plan and if students master grade level standards by the use of DOK, they will be successful on IAR.		

Quality Instruction Makes A Difference

"Good teaching can make a significant difference in student achievement, equal to one effect size (a standard deviation), which is also equivalent to the affect that demographic classifications can have on achievement."

Paraphrase Dr. Heather Hill, University of Michigan

"If a student is in one of the most effective classrooms he or she will learn in 6 months what those in an average classroom will take a year to learn. And if a student is in one of the least effective classrooms in that school, the same amount of learning take 2 years." Darling-Hammond, 1999

Research has indicated that... "teacher quality trumps virtually all other influences on student achievement."

Stanford University
School of Education

(e.g., Darling-Hammond, 1999; Hamre and Pianta, 2005; Hanushek, Kain, O'Brien and Rivken, 2005; Wright, Horn and Sanders, 1997)

The Teacher Makes the Difference

- No matter how well a teacher plans and structures learning tasks, it is the teacher's ability **to make different decisions for different students at different times that informs** the power and effectiveness of the instruction.

- The **moment-to-moment instructional decisions teachers make based on their observations and analysis of children's learning behaviors are significant.** The teacher teaches the child, not the book or program.

(Hattie 2015, p 2; Hattie 2017).

Retaining Quality Teachers First

Teachers influence student achievement more than any other school-based factor.
Improving teachers' well-being enables them to be more effective in the classroom and form more positive relationships with students and colleagues.
As stress levels decrease and morale improves,
teachers also typically have fewer absences and less turnover.
Hanover Research 2022

The Assumption is….

Teacher Qualities are hard to measure:

1. Teacher Certification and the Program Completed –What did it include?

2. Teacher Characteristics-No Studies have proven what characteristics exactly does a teacher need? Teacher Quality and Student Achievement, March 2008 Laura Goe, Ph.D. Leslie M. Stickler ETS

3. From all the studies I have read, there is **not one** that states the qualities a good teacher has to have to successfully advance learning. There are assumptions, but no facts I can find.

   – All I can rely on is my experience in education (39 years teaching students and 21 years supporting teachers). Since 2002, I have been in over 2000 classrooms across the state of IL while Supporting Instructional Coaches in their schools. I trained, assisted in analyzing data, observed in whole districts to find areas of need, worked with cohorts of teachers and coaches, worked with administrators on leadership skills and teacher training etc.,.

   – The list I give on the next slide are what supported raising learning levels in students across those districts. This is my list. It is not researched, but it is consistent with successful student learning.

How Does the Teacher Make the Difference?
Human Qualities That Work…

First of all, self-care.
- This means not only physically and emotionally, but a balance in home/social life and work life.

Second, by learning about learning.

- Purpose Driven by the Plan for the Year, The Human Beings she/he will be with, and The Goal of Students Success for ALL. Use a Universal Screener, Mid Year and End. In between use diagnostic assessments along with formative assessment. Discuss with peers on a regular basis.
- Clearly making sure all students understand the purpose, lessons, outcome, and how the learning relates to the real world
- Conversations about students and Observing students and learning about how they learn-IEP/504, Gifted, Strugglers and planning interventions that support their weakest areas.
- Understanding the NOT YET theory-Sometimes it takes more time to master standards
- Understanding the Learner's brain and letting students know about how to retain information
- Knowing what a brain needs in order to be prepared to learn-novelty, fun, movement, relationships
- Supporting students in metacognition
- Reflecting on a unit or lessons. What went well and what needs to be changed?
- Keeping track of findings as evidence to make decisions –Student talk, student behavior and the time of the behavior, conversations you have, interests they talk about……
- Setting up conference time to build relationships with students
- Assessments that are ongoing **and used to make decisions**
- How to analyze formative and summative assessments for differentiation
- When to intervene and support students before Tier 3-Keep a data chart on them to see if what you are doing is working.
- Communicating with peers, students, families –more positive than negative -Include families at school
- Goals are set and shared with students so they can see that having a goal and working toward that goal is life-changing or at least positive.
- Knowing that students can only be attentive for the minutes of their age. Student Talk should be 80% of the class time. Teach in Chunks, then have students talk or do something then teach another chunk, and so on…..
- Having a beginning that is the meat of a lesson, in the middle practice that is authentic and formatively assessed, and ending with a short review discussion with a partner about what the learning was that day.
- Clear expectations –Mine was Treat Others The Way You Want To Be Treated. Each Day is A New Day!

Task Two –Use the last slide

- The list on the last slide is a list of a super human qualities in a teacher.

- What areas on that list do you need to try this year?

- How could you accomplish this?

Evaluation Time and Quality Teaching

- Every teacher in every school has a different type of evaluation of their instruction and relationships.

- Know the Domains and Elements of your system.

- This might add to the qualities of a great teacher in the eyes of the evaluator.

- It might be a starting place to set some goals for yourself.

- This could also help decide on what artifacts you will show your evaluator at your conference time.

Preparing for the Year

- **Know your Standards your class needs to master** in all Contents that you Teach
- **Know your grade level state test** and look at the wording of some of the questions so you provide students with the academic vocabulary throughout the year, so they will understand how to complete a task on the test.
- Plan accordingly with **Units to cover more than one standard.**
- **Plan Assessments** that will be given:
  - Pre-Assess to know where the students are before you begin
  - Take that knowledge and rework the unit to fit their readiness levels
  - Formatively assess ongoing to see if students are getting the lesson
  - Change lessons to meet their needs remembering what you know about them and the brain.
  - Lessons should be engaging with authentic tasks.
  - Reteach if necessary in a different manner to the students that struggle.
  - Make sure that students who already know the standards are accommodated with practice that is more complex, not more work. Look at the standard above your grade level and prepare something with that standard in mind.
- Continue throughout the year with this plan. Changing with the data you receive.

http://www.edutopia.org/blog/deeper-learning-ted-talks-heather-wolpert-gawron great video

When you begin a lesson, think of these things….

- Collaboration
- Communication
- Critical Thinking
- Creativity

Add Differentiation to the mix and learning happens.

- Content (What you want them to know)
- Process (How you will get them to understand it)
- Product (How they will show you that they mastered it)
- Learning Environment (Where they learned it-Brain Friendly and Emotionally/Physically Friendly Learning Environment)

Let's Recap Before WE Go ON

The teacher is the one who sets learning up.

Throughout the Year, Changes will happen according to the data and the standards.

- Clear Expectations for You and Students
- Knowing the Curriculum (the Standards),
- Knowing How to Set Up a Lesson, How ongoing assessment works
- Knowing what Authentic types of Tasks need to be set up in the Lesson
- Using data to differentiate
- Giving students lots of time to talk about their learning,
  - Listening in on their talk is a formative assessment for your teaching
- Changing pace when needed
- Asking for Help if needed
- Reflecting on how it is going
- Changing things if needed
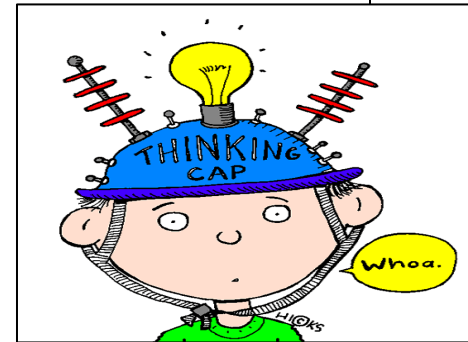- and most of all enjoying the journey. Because it is a JOURNEY…

The "REAL" Definition of Webb's Depth of Knowledge

- A scale of cognitive demand (thinking) to align standards with assessments
- Based on the research of Norman Webb, University of Wisconsin Center for Education Research and the National Institute for Science Education
  - ❑Defines the "ceiling" or highest DOK level for each Core Content standard for the state assessment
  - ❑Guides item development for state assessments

Blooms is a tool for instruction
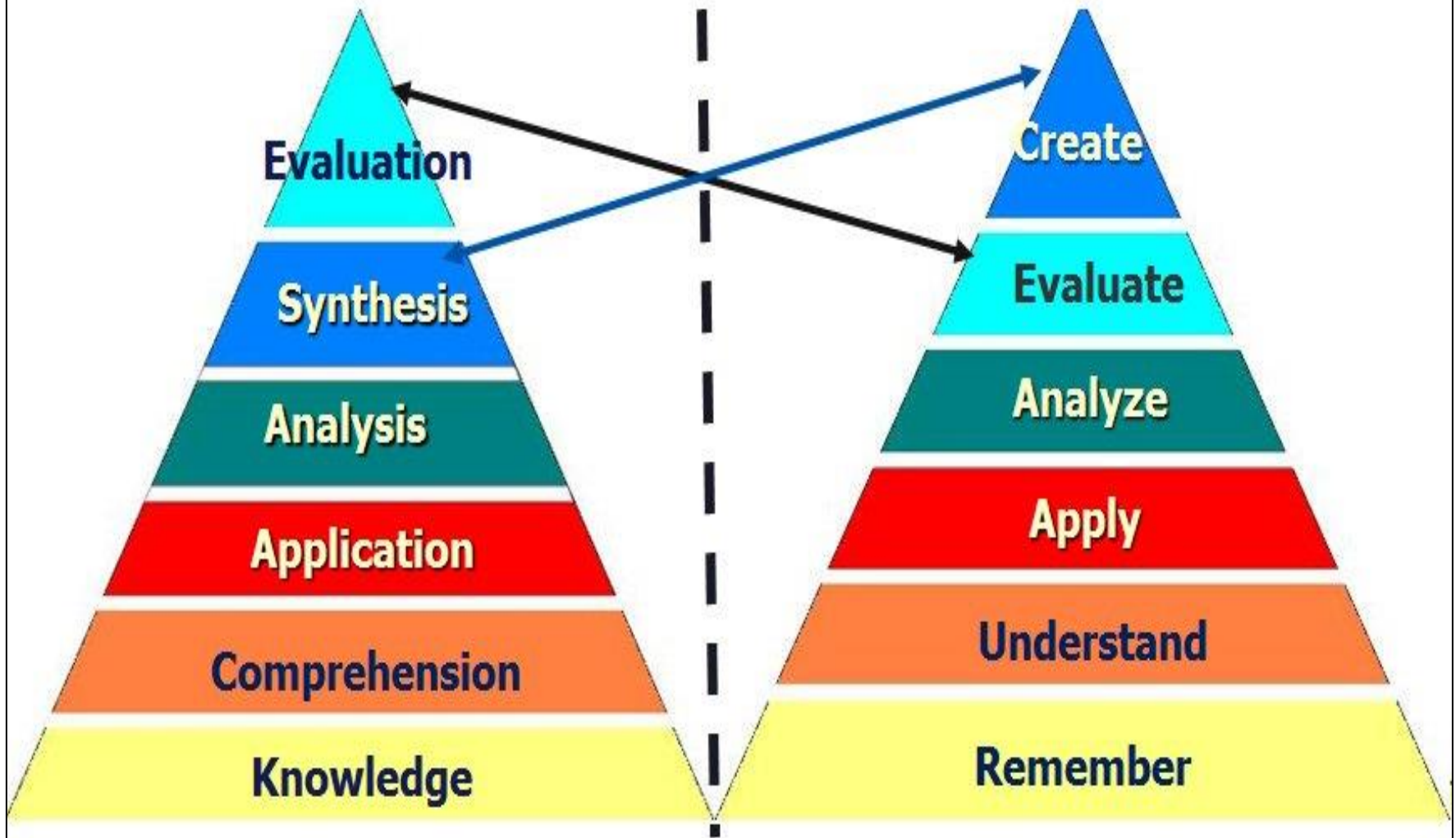
DOK is a tool for assessment

Now students must be able to explain *how it is done*, express *why it can be done*, and expound upon *what else can be done* with the concepts and content they are learning.
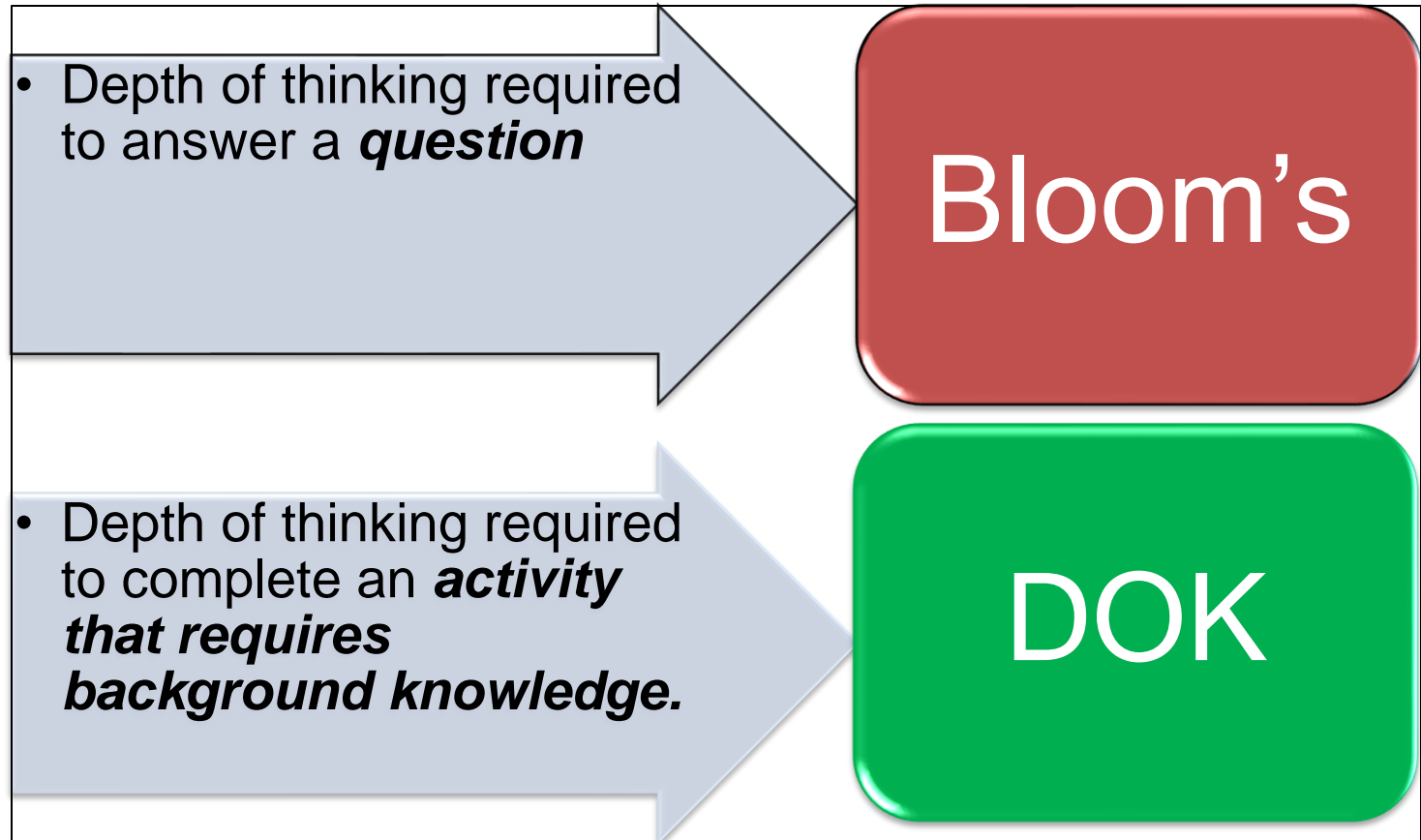
DOK is not the same as "Bloom's"

- Depth of thinking required to answer a *question* → **Bloom's**

- Depth of thinking required to complete an *activity that requires background knowledge.* → **DOK**
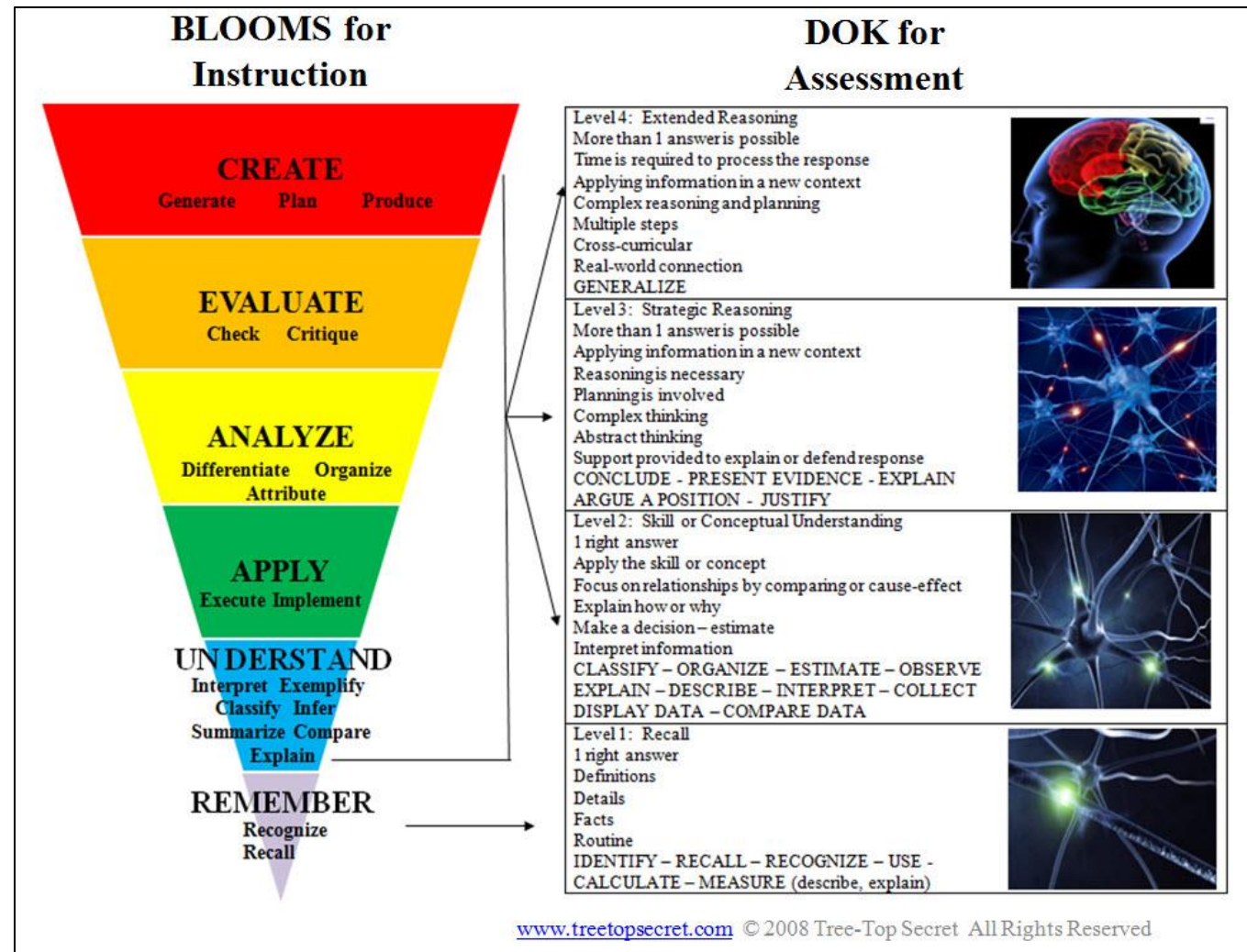
Leveling Questions
Is a part of Differentiation.

We want students to be successful and that may mean leveling questions and moving students up the inverted pyramid of Blooms or Using Webb's Depth Of Knowledge with Blooms.
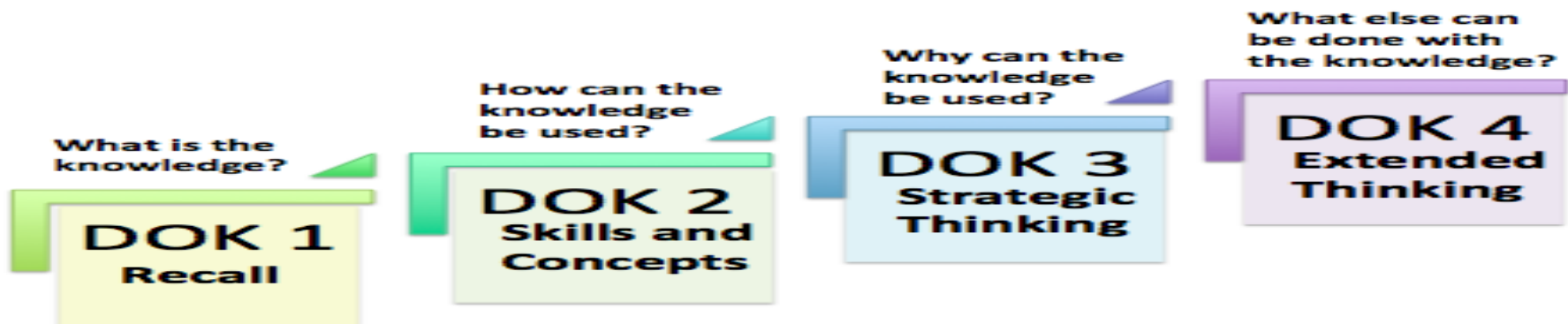
Asking better questions inside small groups and in individual or group work makes a difference in learning.

BLOOMS for Instruction

CREATE
Generate   Plan   Produce

EVALUATE
Check   Critique

ANALYZE
Differentiate   Organize
Attribute

APPLY
Execute Implement

UNDERSTAND
Interpret Exemplify
Classify Infer
Summarize Compare
Explain

REMEMBER
Recognize
Recall

DOK for Assessment

Level 4: Extended Reasoning
More than 1 answer is possible
Time is required to process the response
Applying information in a new context
Complex reasoning and planning
Multiple steps
Cross-curricular
Real-world connection
GENERALIZE

Level 3: Strategic Reasoning
More than 1 answer is possible
Applying information in a new context
Reasoning is necessary
Planning is involved
Complex thinking
Abstract thinking
Support provided to explain or defend response
CONCLUDE - PRESENT EVIDENCE - EXPLAIN
ARGUE A POSITION - JUSTIFY

Level 2: Skill or Conceptual Understanding
1 right answer
Apply the skill or concept
Focus on relationships by comparing or cause-effect
Explain how or why
Make a decision – estimate
Interpret information
CLASSIFY – ORGANIZE – ESTIMATE – OBSERVE
EXPLAIN – DESCRIBE – INTERPRET – COLLECT
DISPLAY DATA – COMPARE DATA

Level 1: Recall
1 right answer
Definitions
Details
Facts
Routine
IDENTIFY – RECALL – RECOGNIZE – USE -
CALCULATE – MEASURE (describe, explain)

Thinking and Inquiry-Questioning is important

Level One Activities	Level Two Activities	Level Three Activities	Level Four Activities
Recall elements and details of story structure, such as sequence of events, character, plot and setting.	Identify and summarize the major events in a narrative.	Support ideas with details and examples.	Conduct a project that requires specifying a problem, designing and conducting an experiment, analyzing its data, and reporting results/ solutions.
Conduct basic mathematical calculations.	Use context cues to identify the meaning of unfamiliar words.	Use voice appropriate to the purpose and audience.	Apply mathematical model to illuminate a problem or situation.
Label locations on a map.	Solve routine multiple-step problems.	Identify research questions and design investigations for a scientific problem.	Analyze and synthesize information from multiple sources.
Represent in words or diagrams a scientific concept or relationship.	Describe the cause/effect of a particular event.	Develop a scientific model for a complex situation.	Describe and illustrate how common themes are found across texts from different cultures.
Perform routine procedures like measuring length or using punctuation marks correctly.	Identify patterns in events or behavior.	Determine the author's purpose and describe how it affects the interpretation of a reading selection.	Design a mathematical model to inform and solve a practical or abstract situation.
Describe the features of a place or people.	Formulate a routine problem given data and conditions. Organize, represent and interpret data.	Apply a concept in other contexts.	

Webb, Norman L. and others. "Web Alignment Tool" 24 July 2005. Wisconsin Center of Educational Research. University of Wisconsin-Madison. 2 Feb. 2006. <http://www.wcer.wisc.edu/WAT/index.aspx>.

What is the knowledge?
DOK 1 Recall

How can the knowledge be used?
DOK 2 Skills and Concepts

Why can the knowledge be used?
DOK 3 Strategic Thinking

What else can be done with the knowledge?
DOK 4 Extended Thinking

The Hess Cognitive Rigor Matrix: Applies Webb's DOK to Bloom's Cognitive Process Dimensions

| Depth + thinking	Level 1 Recall & Reproduction	Level 2 Skills & Concepts	Level 3 Strategic Thinking/ Reasoning	Level 4 Extended Thinking
Remember	-Recall, locate basic facts, details, events	Not appropriate at this level		
Understand	-Select appropriate words to use when intended meaning is clearly evident	-Specify or explain relationships -summarize -identify central idea	-Explain, generalize, or connect ideas using supporting evidence (quote, example…)	-Explain how concepts or ideas specifically relate to other content domains or concepts
Apply	-Use language structure (pre/suffix) or word relationships (synonym/antonym) to determine meaning	-Use context to identify meaning of word -Obtain and interpret information using text features	-Use concepts to solve non-routine problems	-Devise an approach among many alternatives to research a novel problem
Analyze	-Identify whether information is contained in a graph, table, etc.	-Compare literary elements, terms, facts, events -analyze format, organization, & text structures	-Analyze or interpret author's craft (literary devices, viewpoint, or potential bias) to critique a text	-Analyze multiple sources -Analyze complex/abstract themes
Evaluate			-Cite evidence and develop a logical argument for conjectures	-Evaluate relevancy, accuracy, & completeness of information
Create	-Brainstorm ideas about a topic	-Generate conjectures based on observations or prior knowledge	-Synthesize information within one source or text	-Synthesize information across multiple sources or texts

Task Three-What questions are you asking inside your classrooms?

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

Examples of: Recall and Reproduction DOK Level 1
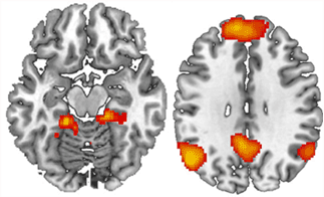
- **List** animals that survive by eating other animals
- **Locate or recall** facts about global warming.
- **Describe** physical features of the desert.
- **Determine** the perimeter or area of rectangles of the one pyramid of Egypt.
- **Identify** elements of the Tango using music terminology we have studied.
- **Identify** basic rules for participating in volleyball.
ALWAYS ASK FOR EVIDENCE TO SUPPORT THE ANSWERS AND THIS RAISES THE QUESTION HIGHER.

<u>DOK Level 2</u>

• Includes the engagement of some mental processing beyond recalling 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

Examples: Skills/Concepts: DOK 2

- Compare desert and tropical environments
- Identify and summarize the major events, problems, solutions, conflicts in the text The Dust Bowl.
- Explain the cause-effect of the Civil War.
- Predict a logical outcome based on information in a reading selection of your choice on legalizing marijuana.
- Explain how good work habits are important at home, school, and on the job for keeping a job and moving up.
- Classify plane and three dimensional figures used in our last geometry chapter.
- Describe various styles of music in the 1920's.

ALWAYS ASK FOR EVIDENCE TO SUPPORT THE ANSWERS.
This makes the question level higher.

Strategic Thinking: Level 3

Hmmm.
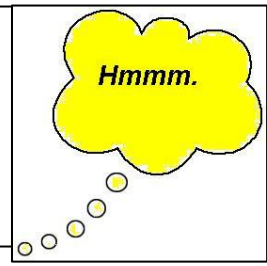
•Requires deep understanding exhibited through planning, using evidence, and more demanding cognitive reasoning

• The cognitive demands are complex and abstract

• An assessment item that has more than one possible answer and requires students to justify the response would most likely be a Level 3-

Asking for evidence to support the answer-Common Core requires this.

Examples: __DOK Level 3: Strategic Thinking__

• Compare consumer actions and analyze how these actions impact the environment. Support your answer with evidence from the content.

• Analyze or evaluate the effectiveness of literary elements (e.g., characterization, setting, point of view, conflict and resolution, plot structures) of the last novel we read. Support your answer with evidence from the content learned.

• Solve a multiple-step problem and provide support with a mathematical explanation that justifies the answer.
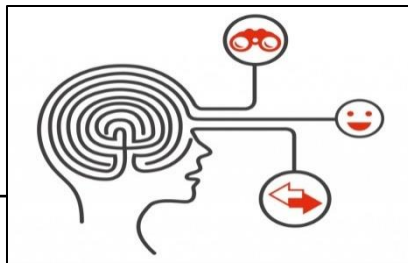
More Examples: DOK Level 3

1. Develop a scientific model for a complex idea of cell splitting. -Site your sources
2.   Propose and evaluate solutions for student loan crisis.-Site your sources
3.   Explain, generalize or connect ideas, using supporting evidence from a text or source on the idea of strikes.
4.   Create a dance that represents the characteristics of a the Indian culture. Site your sources.

Extended Thinking: Level 4

- Requires <u>high cognitive demand</u> 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

Examples: Extended Thinking: DOK 4
These require more than one source of content

The IAR Research Simulation Tasks are DOK 3 & 4

- Gather, analyze, organize, and interpret information from multiple (print and non print) sources to draft a reasoned report about the impact of Slavery.

- Analyzing author's craft (e.g., style, bias, literary techniques, point of view) in Shel Siverstein's Work.

- Create an exercise plan applying the "FITT (Frequency, Intensity, Time, Type) Principle" to the plan. Give the details on why it works physically and mentally.

The IAR Test asks students to write essays on three different tasks. Literary Analysis Task, Research Simulation Task, & Narrative Task explained above. These are Level 3 and 4 DOK.

1. **Literary Analysis Task (LAT) plays an important role in assessing students' ability to read complex text closely. Research reveals that this is the most significant factor that differentiates between college-ready and non-college-ready readers. provides students an opportunity to show their understanding of literature.   It asks students to read two literary texts, answer six multiple-choice questions about the texts,** and <u>**write an extended response that analyzes key ideas (development of theme, interaction of literary elements, structure's relationship to meaning, effects of point of view, etc.) in the texts.**</u>

2.   **Research Simulation Task (RST) asks** students to <u>**analyze information in several articles or multimedia.**</u> The first text is an anchor text to introduce the topic. Students answer a series of questions about the texts. Then they <u>**put the information together from the various sources to write an essay that demonstrates their analysis. Students must show evidence from the text or multimedia source that supports their answer.**</u>

3. **Narrative Task (NT)** asks students to write a <u>**story, detail a scientific process, write a historical account of important figures, or to describe an account of events, scenes or objects,**</u> for example.

EXAMPLES WRITING TASKS IAR TESTING

This is a 3rd Grade IAR Question in ELA Test. Two contents are given to the students to read.

Today you will do some research on animals and their natural environments. First, you will read an article about wolves in Yellowstone National Park. Then you will read an article titled "The Missing Lynx." As you read these sources, you will gather information and answer questions about animals and their environments so you can write a response.

This is the Research Simulation Task –Compare/Contrast Essay

- You read the articles "A Howling Success" and "The Missing Lynx." Think about the key details in each article that show how people can help animals.

- Write an **essay comparing and contrasting the key details presented in the two articles** about **how endangered animals can be helped. Use specific details and examples from both articles to support your ideas**.

This is an example from a 4ᵗʰ Grade IAR Test Question. These students will read about wild horses and watch a video about wild horses.   Three Contents to deal with.

Today you will research wild horses in the United States and read articles about them and view a video.   As you review these sources, you will gather information about the illustrations and answer questions about wild horses so you can write an essay.

This is the Research Simulation Task

Your class has been studying the survival of the ponies on Assateague Island. Using information **from the article and the video, write a report describing the role** that both the horses and humans play in the horses' survival. Be sure to **include evidence from the article and the video to support your answer.**

This is a 6th Grade IAR Question. They will read 2 articles and view one video

Today you will research how zoos impact animals. You will read one article titled "The Stripes Will Survive." Then you will read one passage titled "The Zoos Go Wild" and view one video *Behind the Scenes with the National Zoo's Lion Cubs*. As you review these sources, you will gather information and answer questions about how zoos impact animals so you can write an essay.

The Research Simulation Task is a Compare and Contrast essay Using Evidence from three sources.

- You have read two texts and viewed one video that claim that the role of zoos is to protect animals. Write an essay that compares and contrasts the evidence each source uses to support this claim. Be sure to use evidence from all three sources to support your response.

This is an example of 7th grade Unit 1 Computer Based Test on the IAR Assessment.

Notice it tells students you will be encountering two contents, a passage and a play. As students write they must go back and find evidence to support their writing from both contents.

Today you will read a passage from The Count of Monte Cristo as well as a scene from the play Blessings. After you have read the selections and answered some questions, you will write an essay analyzing the themes presented in the two texts.

This is a Literary Analysis from the IAR Test.

- You have read a passage from The Count of Monte Cristo and a scene from Blessings. Think about the similarities and differences in how the two authors develop the themes in each text.

- Write an essay in which you identify a theme from each text and analyze how each theme is developed. Be sure to include specific details from both selections.

Task Four Content Activity

The IAR Test Questions in the ELA Test has DOK like questions. You just saw 4 examples.

1. How can you mimic these inside your classroom on a monthly basis?

2. What strategies could you teach students to make IAR questions easier to answer for them?

3. Give me a lesson you are working on or will work on and tell me the Narrative Task, Literary Analysis Task, or Research Simulation Task you will present to the students.   Just Choose ONE

Students can do no better than…

o The assignment they are given

o The assessment they are given

o The tools and strategies they are taught to use

o The questions they are asked and they ask themselves

o The feedback they are given

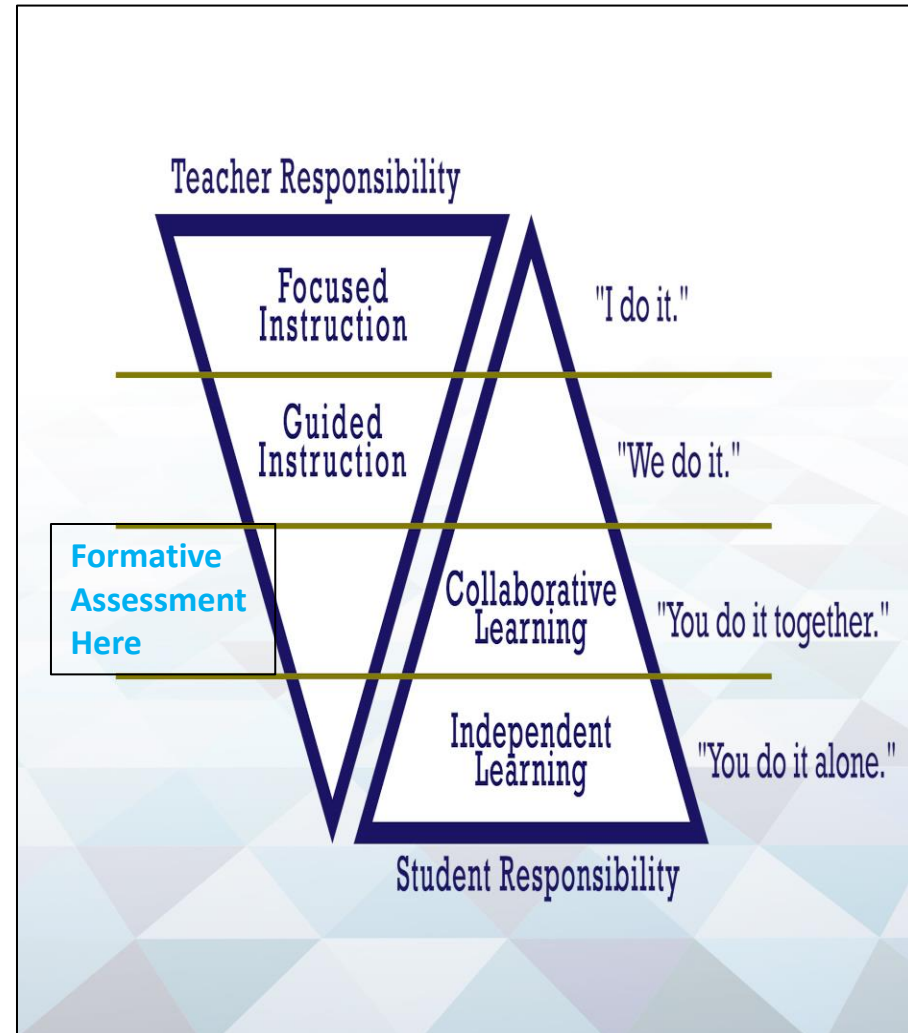o What they spend time doing and the models they receive

From: Educational Trust, 2006

Make sure when you are teaching a concept that use the Gradual Release Model of Responsibility. Don't leave out any part of the four.

Teacher DO- Model what you want them to do

WE DO- Then we all try it together

TWO DO- Then partners try it with the teacher watching and supporting-This is **where the teacher can fix any misconceptions or support the students before they practice wrong. (formative assessment is in this spot) DO NOT FORGET THIS PART OF THE RELEASE.**

YOU DO- Try it on their own.


Teacher Responsibility

Focused Instruction — "I do it."

Guided Instruction — "We do it."

Formative Assessment Here

Collaborative Learning — "You do it together."

Independent Learning — "You do it alone."

Student Responsibility

Task Five

- Watch this short video and then answer this question.
- https://www.youtube.com/watch?v=ZwB1gX9PK-w&t=58s 1.03 minutes long
- From the last slide on the Gradual Release of Responsibility, why is the TWO DO part so important to a successful YOU DO?

Tips for Creating High-Level Questions

The following simple tips can get ALL students involved in the lesson and help them gain a deeper understanding of the content by challenging them to think critically. **Use the Gradual Release of Responsibility (on slide before)**

1. **Create a Level 3 or 4 Question for Each Lesson**
2. **Require students to answer the question with evidence supporting their answer**
3. **Differentiate questions as appropriate with less steps or minimal vocabulary to comprehend. Could give opportunity for partner work too.**
4. **Promote examination of new and different perspectives.**
5. **You will know how students are thinking by looking at their answers and evidence. This is a formative way to see how they approach a Level 3 or 4 Question.**
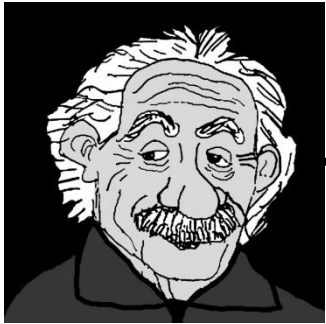
"Extending the length of an activity alone does not necessarily create rigor!"
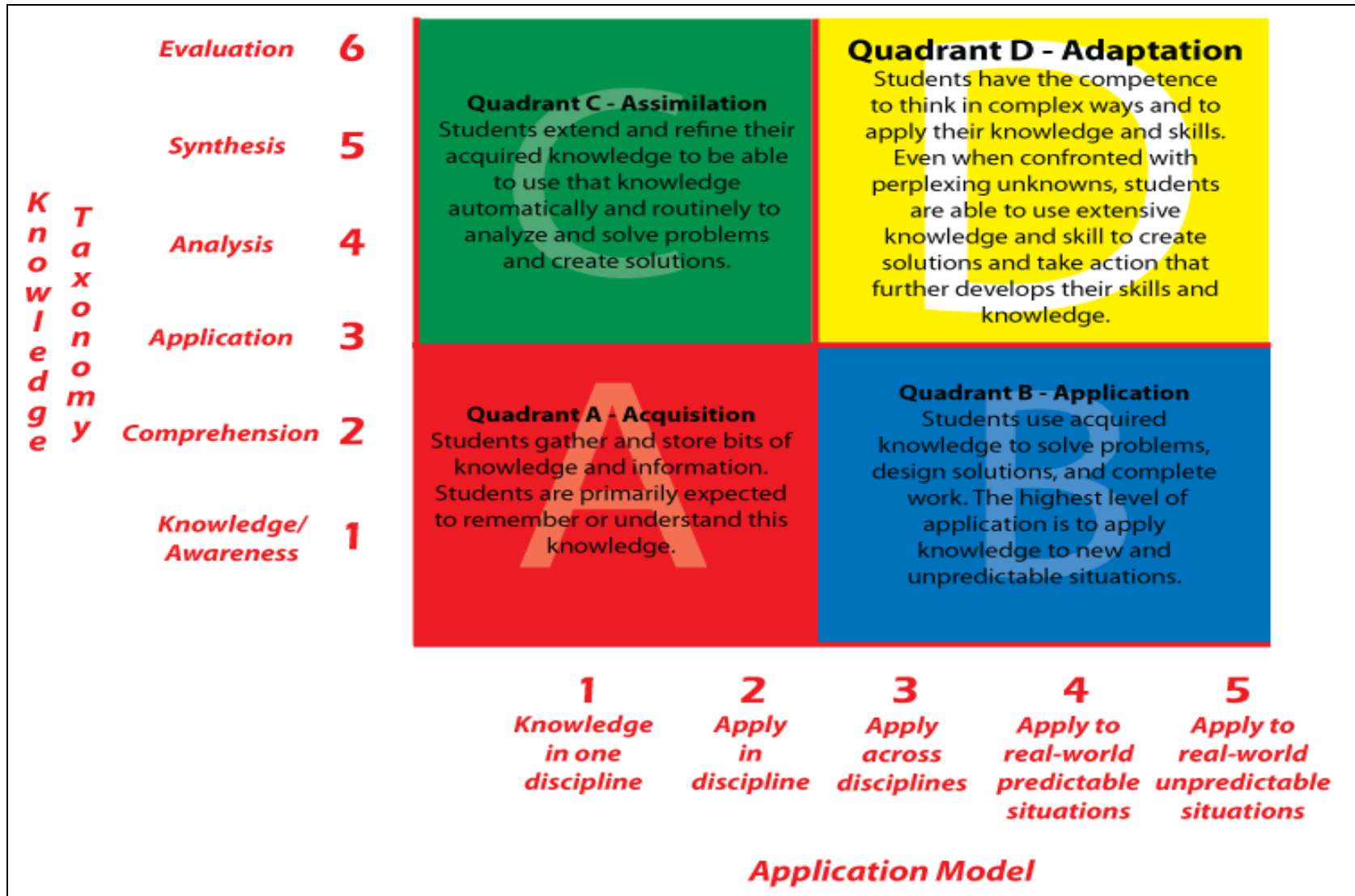
Task	Thinking
Collecting data samples over several months	Recall
Organizing the data in a chart	Skills/ concepts
Using this chart to make and justify predictions	Strategic Thinking
Developing a generalized model from this data and applying it to a new situation	Extending Thinking

What is Rigor? Why do we need it?

- **<u>Rigor is the result of work that challenges students' thinking in new and interesting ways.</u>** It occurs when they are encouraged toward a sophisticated understanding of fundamental ideas and are driven by curiosity to discover what they don't know.

- **Rigor is not defined by the text -- it comes from what students do.** It is not standard across a curriculum -- it is individual to each student's needs. It is not quantified by how much gets crammed into a school day -- **it is measured in depth of understanding.**

- **Rigor is a result, not a cause**.

David Foster Wallace, great 20th-century novelist 1994

The Rigor/Relevance Framework has four quadrants. Each is labeled with a term that characterizes the learning or student performance at that level. Bill Daggett 2008
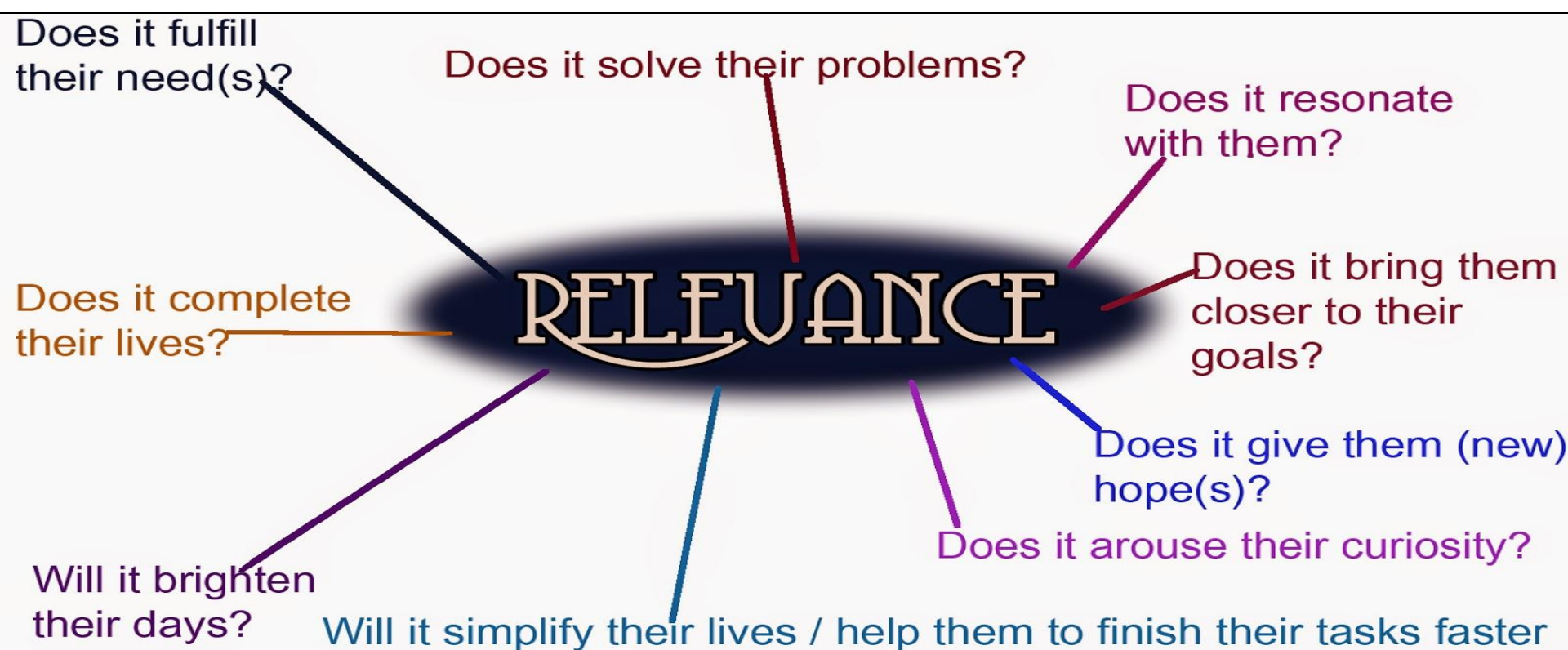
Knowledge Taxonomy		
Evaluation	6	
Synthesis	5	
Analysis	4	
Application	3	
Comprehension	2	
Knowledge/Awareness	1	

Quadrant C - Assimilation
Students extend and refine their acquired knowledge to be able to use that knowledge automatically and routinely to analyze and solve problems and create solutions.

Quadrant D - Adaptation
Students have the competence to think in complex ways and to apply their knowledge and skills. Even when confronted with perplexing unknowns, students are able to use extensive knowledge and skill to create solutions and take action that further develops their skills and knowledge.

Quadrant A - Acquisition
Students gather and store bits of knowledge and information. Students are primarily expected to remember or understand this knowledge.

Quadrant B - Application
Students use acquired knowledge to solve problems, design solutions, and complete work. The highest level of application is to apply knowledge to new and unpredictable situations.

1	2	3	4	5
Knowledge in one discipline	Apply in discipline	Apply across disciplines	Apply to real-world predictable situations	Apply to real-world unpredictable situations

Application Model

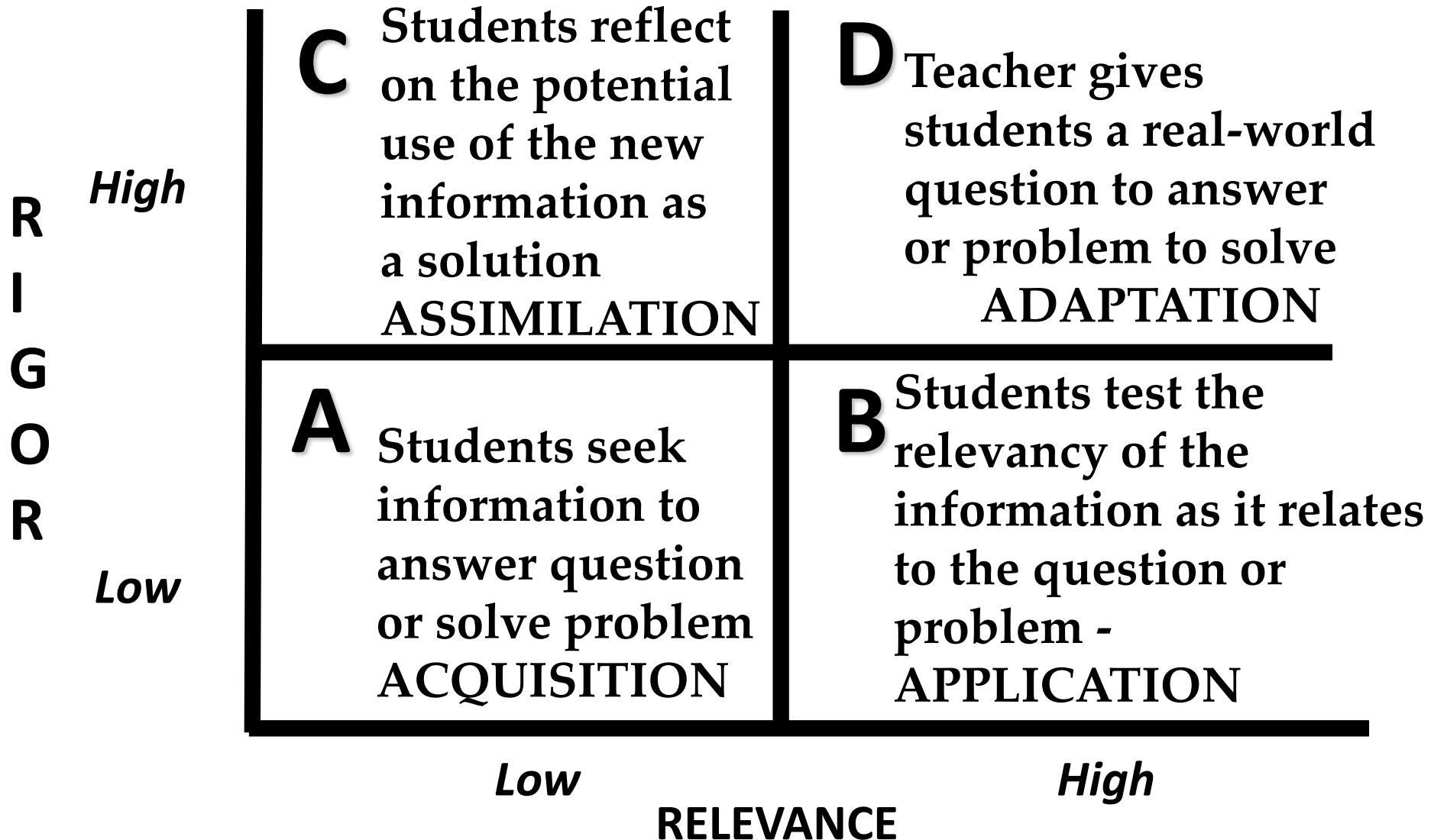| A Acquisition	B Application	C Assimilation	D Adaptation
Students gather and store bits of knowledge and information. Students are primarily expected to remember or understand this knowledge.	Students use acquired knowledge to solve problems, design solutions, and complete work. The highest level of application is to apply knowledge to new and unpredictable situations.	Students extend and refine their acquired knowledge to be able to use that knowledge automatically and routinely to analyze and solve problems and create solutions.	Students have the competence to think in complex

- Complex ways in which we think. The **low end involves acquiring knowledge** and being able to **recall or locate** that knowledge.
- The **high end labels the more complex** ways in which individuals **use knowledge, such as taking several pieces of knowledge and combining them in both logical and creative ways.**
- The low end of the Application continuum is **knowledge acquired for its own sake,**
- the **high end signifies action**—use of that **knowledge to solve complex, real-world problems and create projects, designs, and other works for use in real-world situations.** (Bill Daggett)

Task Six -What is Rigor and Relevance ?

When you plan lessons for mastering a standard, do you plan for Rigor and Relevance? Explain how?

Does it fulfill their need(s)?

Does it solve their problems?

Does it resonate with them?

Does it complete their lives?

RELEVANCE

Does it bring them closer to their goals?

Will it brighten their days?

Does it give them (new) hope(s)?

Does it arouse their curiosity?

Will it simplify their lives / help them to finish their tasks faster

Rigor/Relevance Framework

R I G O R

High

Low

C Students reflect on the potential use of the new information as a solution
ASSIMILATION

D Teacher gives students a real-world question to answer or problem to solve
ADAPTATION

A Students seek information to answer question or solve problem
ACQUISITION

B Students test the relevancy of the information as it relates to the question or problem -
APPLICATION

Low　　　　　　　　　　　　**High**

RELEVANCE

Quadrant B

- Students use acquired knowledge to complete tasks with a connection outside school.

- Activities or tasks involve lifelike situations.

- **Does not require higher order thinking.**

- **Low Rigor – High Relevance**

C	D
A	**B**

Quadrant C

- Students are thinking deeply about a problem in the discipline.

- Represents more complex thinking but has less clear value outside of school.

- Students **extend and refine their acquired knowledge to be able to use that knowledge automatically and routinely to analyze, solve problems** and create unique solutions.

- **High Rigor – Low Relevance**

C	D
A	B

Quadrant D

- Students are thinking deeply and **there is a connection to lifelike situations.**

- Even when **confronted with unknowns, students are able to use extensive knowledge and skills to create solutions and take action** that further develops their skills & knowledge.

- **High Rigor – High Relevance**

C	**D**
A	B

Use Money as the Lesson

1   Knowledge of one discipline

Know money values

2   Application within discipline

Solve word problems

3   Application across disciplines

Relate wealth to quality of life

4   Application to real-world predictable situations

Prepare budget for a family of 4

5   Application to real-world unpredictable situations

Handle lottery winnings logically or Handle Saving for a car, home or medical incident.

Webb's Levels of Cognitive Complexity

Depth of Knowledge

Level 1: Recall

Level 2: Skill/Concept

Level 3: Strategic Thinking

Level 4: Extended Thinking
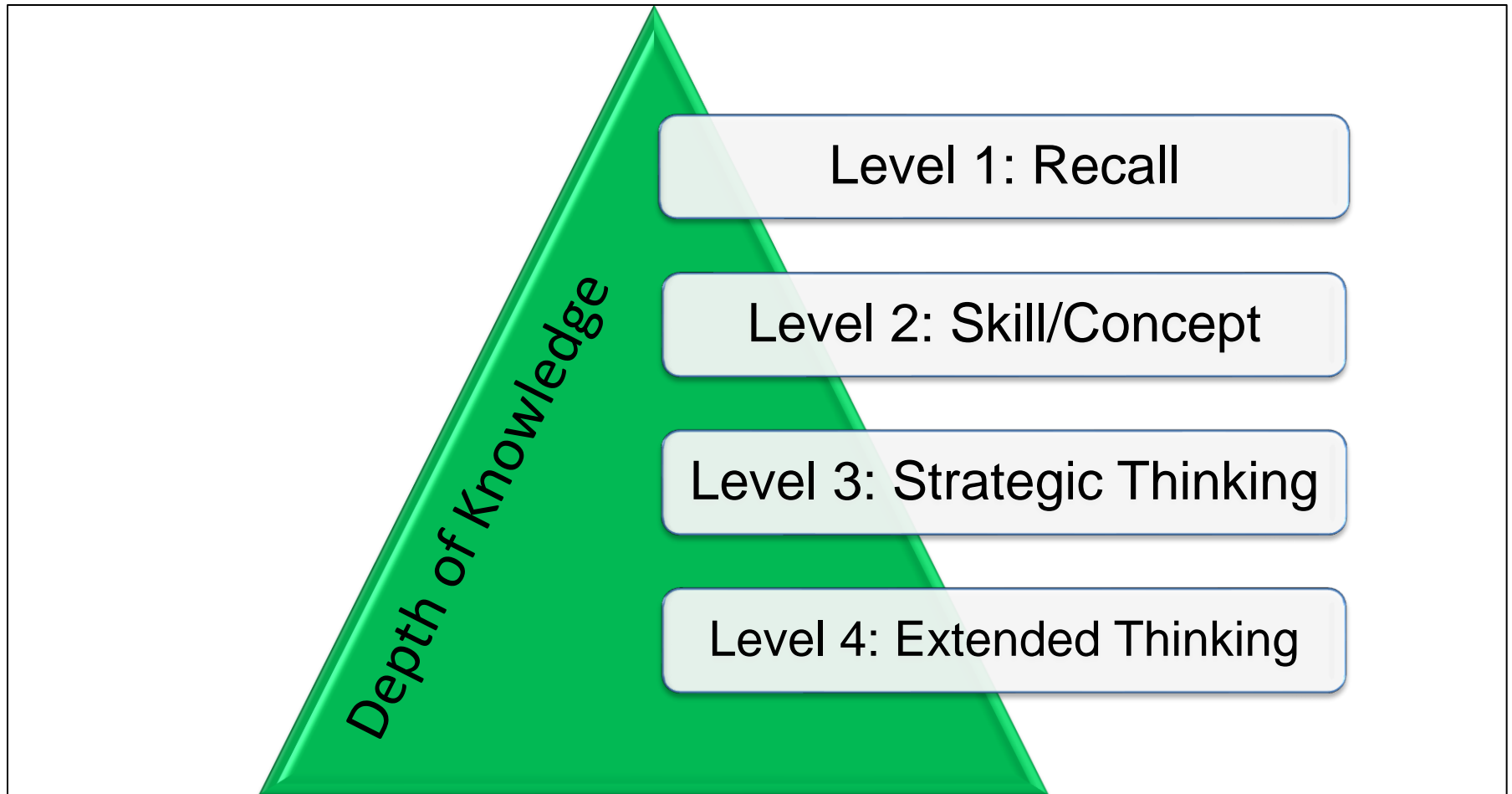
Task Seven -Why Use Depth of Knowledge?

Think about the students. DOK was adopted because it is not about the student background or student skills, it is about asking something cognitively. The Depth of Knowledge classification scheme classifies assessment items or tasks, not students or student work.
Why is it important to think beyond memorizing facts?
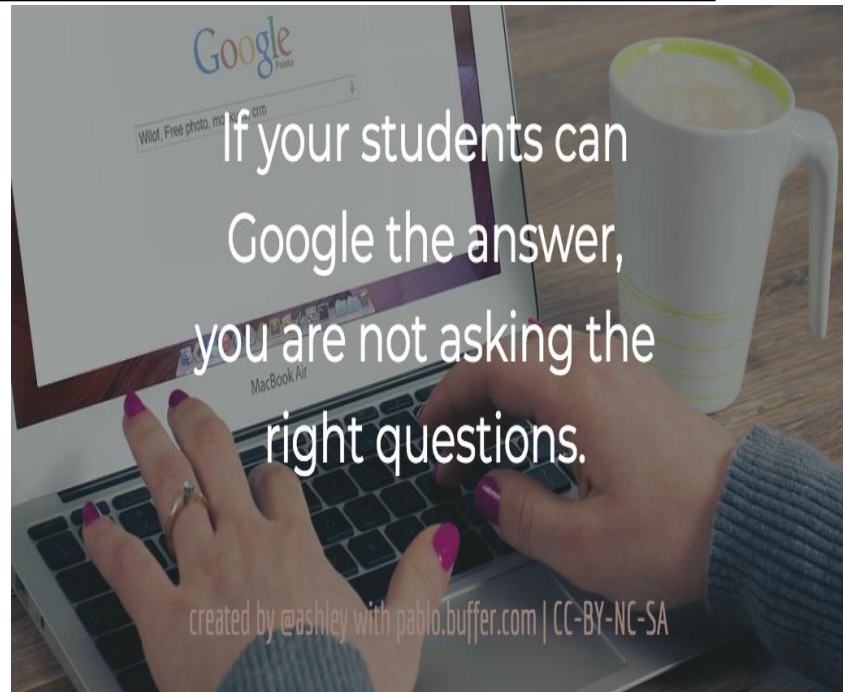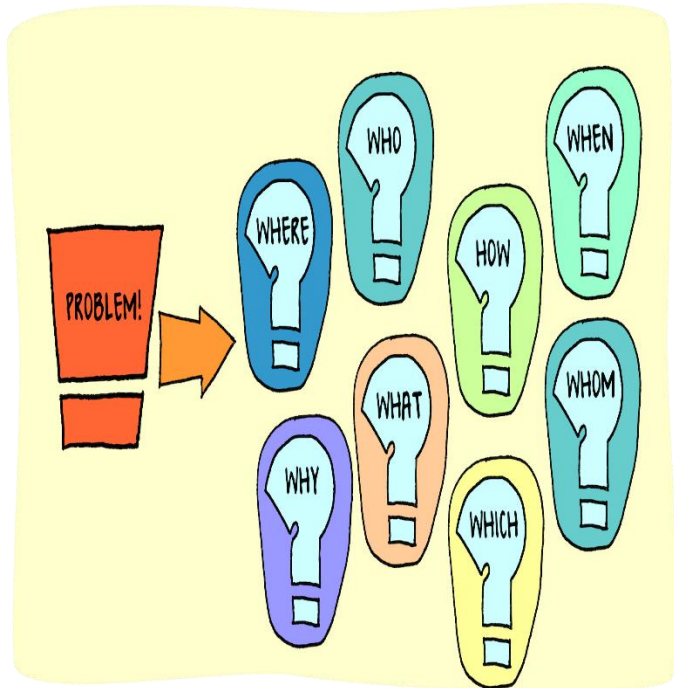
Task EIGHT -Make a T-Chart

These videos show the building of questioning needed to reach CCSS standards

https://www.youtube.com/watch?v=YXXgloyYFkw DOK Chocolate Chip Cookie Model 9.50   Watch First

https://www.youtube.com/watch?v=WMqKN7edRcU   4 min. DOK video using a social studies connection. Watch and put on closed caption to read because the audio is not really good.

New Info	Questions

1. As you watch these videos write down new information and questions you might have on this T-Chart or make one of your own to send to me.

2. Share the information you gathered with me on your T Chart.

Task NINE-Are these good questions?

1. What is the relationship among reading, writing, speaking and listening, and language?
2. What is math?
3. How does science explain our world and ourselves?
4. What is history and whose is it?
5. Why is it important to learn both the language and culture of a foreign country or society?
6. What qualifies as art?
7. Create lyrics from our last history lesson that summarizes the importance of that time in history.
8. What is fitness and health

Task NINE -What DOK level would these ?'s be?

Answers on next slide

Are these good questions?

1. What is the relationship among reading, writing, speaking and listening, and language? 4-You have to know about each of the subjects in order to answer the question.

2. What is math? 1-You can look this up.

3. How does science explain our world and ourselves? 4-Students would have to know the vastness of science and the world and themselves to synthesize it into an explanation.

4. What is history and whose is it? 4-Student needs to know how history effects society and why do we need it at all.

5. Why is it important to learn both the language and culture of a foreign country or society? 4-This is synthesis of culture and why we need to learn about it. Students would need to know what culture is and understand how many different cultures exist in this world.

6. What qualifies as art? 4 students would need to know all about ART and its forms and how it affects the world.

7. Create lyrics from our last history lesson that summarizes the importance of that time in history. **Remember to use rhyme and figurative language to make the message.** 3 It requires students to use one lesson and put it into a rhyme and create a summary with the rhyme.

8. What is fitness and health? 1 students can look up and give a definition with this question.

We could argue about a couple, but the point is we want to go beyond a "2" when assessing student knowledge.

Check Yourself on this one.

Task Activity

1. Assign each ? a DOK level of 1, 2, or 3.

2. Write a DOK level 4 question that would fit here using the verb describe.

1 Verb can have 3 Levels of Thinking "DESCRIBE"

Describe what kind of house you would build to protect yourself from the wolf.

Describe two physical characteristics of the wolf in the *Three Little Pigs*.

Describe the differences between the three houses each pig built.

Answers to Previous Slide
How did you do?

DOK 1: Describe two physical characteristics of the wolf in the Three Little Pigs?

DOK 2: Describe the differences between the three houses?

DOK 3: Describe what kind of house you would build to protect yourself from the Wolf?

DOK 4: Describe what type of shelter you could build for your family to keep everyone safe in a hurricane.

Task Ten -The ITSY BITSY SPIDER

1. Say the rhyme to yourself or look it up and read it. https://www.todaysparent.com/baby/baby-development/itsy-bitsy-spider-lyrics/

2. Say it now with movements.

Now let's create some higher order thinking questions about this nursery rhyme.

- What pattern does the spider show? Which ones can we act out?

- How is the spider's behavior like something you do?

- What characteristics does the spider demonstrate?

- What question would you ask the spider if you could?

Think about the last slide....Did it have Thinking Skills

CLASSIFICATION
- Analyze attributes
- Categorize
- Identify Ambiguity

COMPARATIVE REASONING
- Differentiate
- Compare/Contrast
- Sequence
- Cause/Effect
- Patterns
- Analogies
- Point of view

INQUIRY
- Formulate ?'s
- Pose unknowns

INFERENCE
- Hypothesize
- Predict
- Assume

EVALUATIVE REASONING
- Determine Relevancy
- Substantiate
- Establish and Apply Judgmental Criteria
- Rank or Prioritize
- Interpret

SYNTHESIS
- Conclude
- Generalize
- Think Inductively
- Think Deductively

WE NEED TO ASK BETTER QUESTIONS
Tally during one hour how many literal questions you ask.

Synthesized from the work of Stiggins, 2001 and Kingore. B. (2004)

Expectations for Student Performance

Acquire		Use		Extend	
Recall	**Skill/Concept**	**Strategic Thinking**		**Extended Thinking**	
Memorize	Perform Procedures	Demonstrate Understanding	Conjecture, Generalize Prove		Solve non-routine/ make connections
Memorize	Conduct Investigations	Communicate Understanding	Analyze Information		Apply concepts /make connections
Recall	Demonstrate /Explain	Analyze/ Investigate	Evaluate		Generate /Create

Suggestions for Drafting Questions at Higher Levels

Model Thinking Process Explicitly

– for some students learning what is required will remain a mystery unless taught explicitly

Use Advance Organizers

– Using note-taking and graphic organizers BEFORE the lesson can cue students as to what to expect

– Questions and agendas can also be used to help students anticipate what to look for in the coming lesson

Use Concept Mapping

– Concept Mapping provides students with a framework for visualizing thinking.

Questioning Strategies

Require students to **manipulate prior information**
- •Why do you suppose.....?
- •"What can you conclude from the evidence?

Ask students to **state an idea or definition in their own words.**

Ask questions that **require a solution to a problem**.

Involve students in **observing and describing an event or object.**
- •"What do you notice?"
- •"Tell me about this."
- •"What do you see?"

1. Ask students to **compare or contrast 3 different types of content.**

2. What is the cause and the effect? What could help prevent the cause from happening?

3. What is the problem and the solution? What other solutions can you think of?

4. What is the sequence of a tornado? Could we interrupt the sequence so it would not happen?

5. We are learning history and some of our history has been devastating. Think of one time in history that was difficult. What have you learned that will help that difficult time never repeat itself?

Task Eleven: DOK 4 can be in all the levels

1. Identify two authors who use figurative language in their writing (DOK 1-2)

2. In a short answer form, write a description of what text would look like if an author never used any form of figurative language?(DOK 3)

Can you make a DOK 4 question about figurative language from the question #1 above?

Send it to me.

21st Century Thinkers

Preparing students for 21st Century Skills with DOK

By increasing the DOK levels of activities, teachers can teach students to:

- Adapt to challenges
- Work collaboratively
- Solve problems on their own

- Levels 3 and 4 require students to solve challenging problems in groups without the constant supervision of teachers (real-world application)

Remember,

It's NOT about the **verb**…

The Depth of Knowledge is NOT determined by the verb (Bloom's Taxonomy), **but by the context in which the verb is used and the depth of thinking required.**

Verbs are **<u>not</u>** always used appropriately…

Words like <u>explain</u> or <u>analyze</u> have to be considered in context.

- "Explain to me where you live" does not raise the DOK of a simple rote response.

- Even if the student has to use addresses or landmarks, the student is doing nothing more than recalling and reciting.

DOK <u>is</u> about **<u>what follows the verb...</u>**

What comes after the verb is more important than the verb itself.

"<u>Analyze</u> this sentence to decide if the commas have been used correctly" does not meet the criteria for high cognitive processing."

The student who has been taught the rule for using commas is merely using the rule.

Same Verb—Three Different DOK Levels

DOK 1- <u>Describe</u> three characteristics of metamorphic rocks. (Requires simple recall)

DOK 2- <u>Describe</u> the difference between metamorphic and igneous rocks. (Requires cognitive processing to determine the differences in the two rock types)

DOK 3- <u>Describe</u> a model that you might use to represent the relationships that exist within the rock cycle. (Requires deep understanding of rock cycle and a determination of how best to represent it)
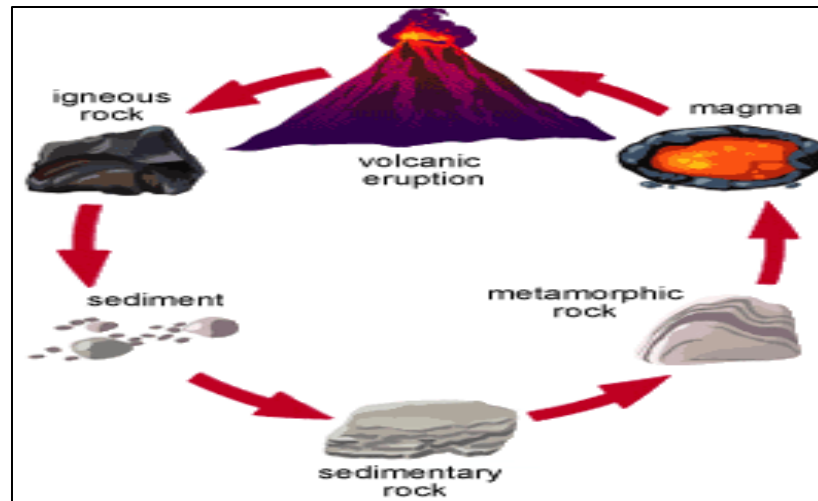
DOK <u>is</u> about intended outcome, <u>not</u> difficulty

DOK is a reference to the **complexity of mental processing that must occur to answer a question, perform a task, or generate a product.**
   ❑ Adding is a mental process.
   - Knowing the rule for adding is the intended outcome that influences the DOK.
   - Once someone learns the "rule" of how to add, 4 + 4 is DOK 1 and is also easy.
   - Adding 4,678,895 + 9,578,885 is still a DOK 1 but may be more "difficult."

DOK is not about difficulty...

❑ Difficulty is a reference to how many students answer a question correctly.

- "How many of you know the definition of exaggerate?"
  DOK 1 – recall
  - If all of you know the definition, this question is an easy question.

- "How many of you know the definition of prescient?"
  DOK 1 – recall
  - If most of you do not know the definition, this question is a difficult question, but still they find the definition.

DOK is about complexity
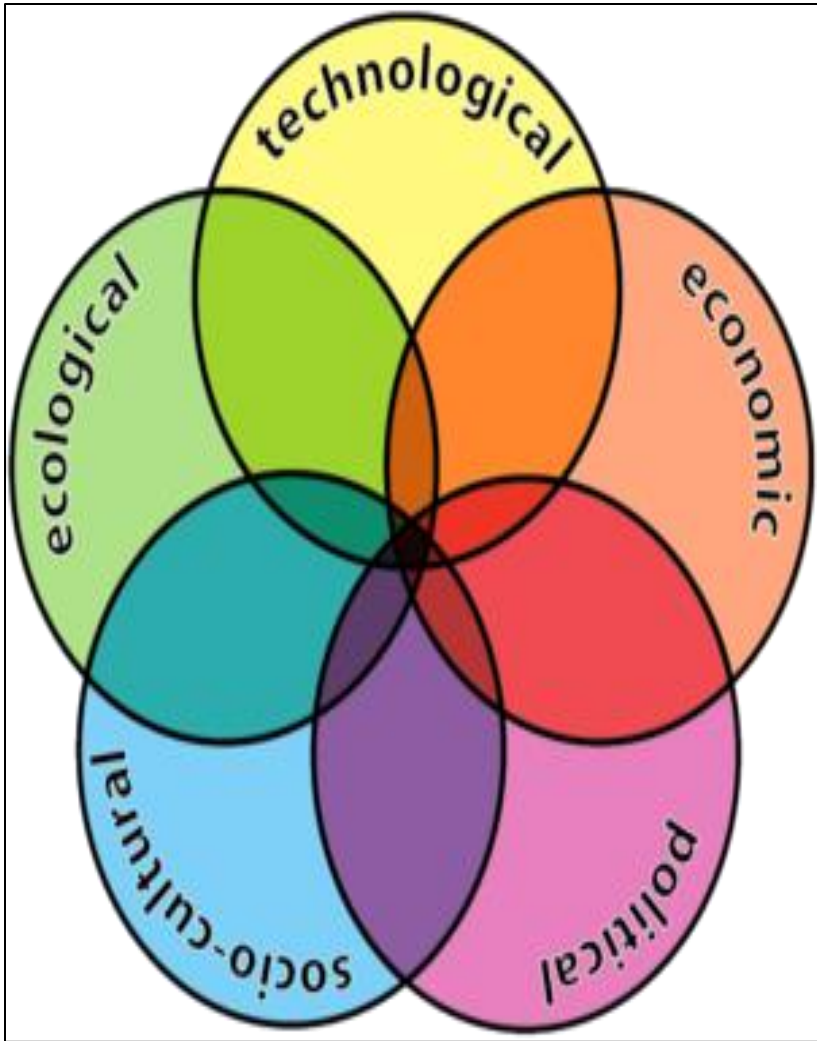
- The intended student learning outcome determines the DOK level.

- Instruction and classroom assessments must reflect the DOK level of the objective or intended learning outcome.

Task Twelve -Great site to use

https://sites.google.com/a/bay.k12.fl.us/power-curriculum-test/webb-dok-resources

1. Using this site, look at 2 resources IN BLUE and summarize how you would use them in your content area or grade level. DOK 3 Question?

2. When you click on one, it will come up in the right hand corner download. Click on it and it will SHOW.

Critical Thinking Across the Curriculum

Thomas Jefferson once wrote: "A democracy cannot survive unthinking citizens."

- **Hypothetical Thinking-Considering possible outcomes…**
  - What if this had (had not happened)?
  - What if this were (were not) true?
  - What if we change____?
  - What if I could do something I cannot do?

Application of Different Symbol Systems: Changing Modalities…

- Can I make this into a word problem?

- Can I make this into a number problem?

- Can I draw a picture of this?

- Can I represent it in musical terms?

- Can I act it out?

- Can I make a dance to represent this?

- Can I take this problem and revise it with other examples and still have success.

Analogy: Comparing dissimilar items on an abstract level-

- How is ____like_____?
- How does this model represent_____?
- How is this process similar to a process you know?
- How can this concept be compared to ___?

Types of Analogies	
Part to whole	battery : flashlight :: hard drive : computer
Cause and effect	fatigue : yawning :: itching : scratching
Person to situation	mother : home :: teacher : school
Synonym	obese : fat :: slender : thin
Antonym	poverty : wealth :: sickness : health
Geography	Chicago : Illinois :: Denver : Colorado
Measurement	pound : kilogram :: quart : liter
Time	March : spring :: December : winter

What if students knew there were only 9 types of analogies that authors use? I would feel relieved.

Analysis of Point of View-Considering author perspective, purpose and audience…

- What else could account for this?
- Who would benefit if I thought this?
- What view of the world does the author assumes the reader holds? How do we know?
- How many other ways could someone look at this?
- Where is the author unclear? Why is it unclear?
- What perspective is missing? Why?
- What does the author want us to believe? Why?
- How does the text depict age, gender, and or cultural relationships? What evidence supports your answer.

Same VERB – three DOK Levels
Social Studies

- DOK 3 examine the amendment process of the West Virginia Constitution, give examples of amendments and <u>explain</u> <u>why</u> they occurred.

- DOK 2   <u>explain</u> <u>how</u> nations benefit when they resolve conflicts peacefully.

- DOK 1 Use correct geographic terminology to <u>explain</u> direction, location, time zones, physical features of the earth.

Task Thirteen What DOK Level Are These ?'s and why?

1. DOK ? _Explain_ what family of functions would best model a particular real-world situation.

2. DOK ? _Explain_ the difference between a linear and a quadratic function.

3. DOK ? _Explain_ how the "vertical line test is useful in determining whether or not a given graph is representing a function.

1-3, 2-2, 3-1

Task Fourteen

Design a statistical experiment from the unit we have been studying. Predict the outcome. Perform the experiment and analyze the outcome. Prepare a graph of the results.

What level question is this one and why? Don't look at the answer on the next slide, please.... Try to answer it on what you have learned so far.

This is a DOK 4 because to plan a statistical experiment, a student must **define the problem and develop a procedure for solving it.**

This involves **identifying the correct statistical model, applying** the model to **data** and **communicating the outcome** of the selected model.

The student must **interpret finding and make reasonable and rationed inferences** from obtained data. This represents a complex, multistep reasoning task.

DOK Levels Can Be Cumulative

- An item/standard written to DOK 3 often contains DOK 1 and DOK 2 level demands.
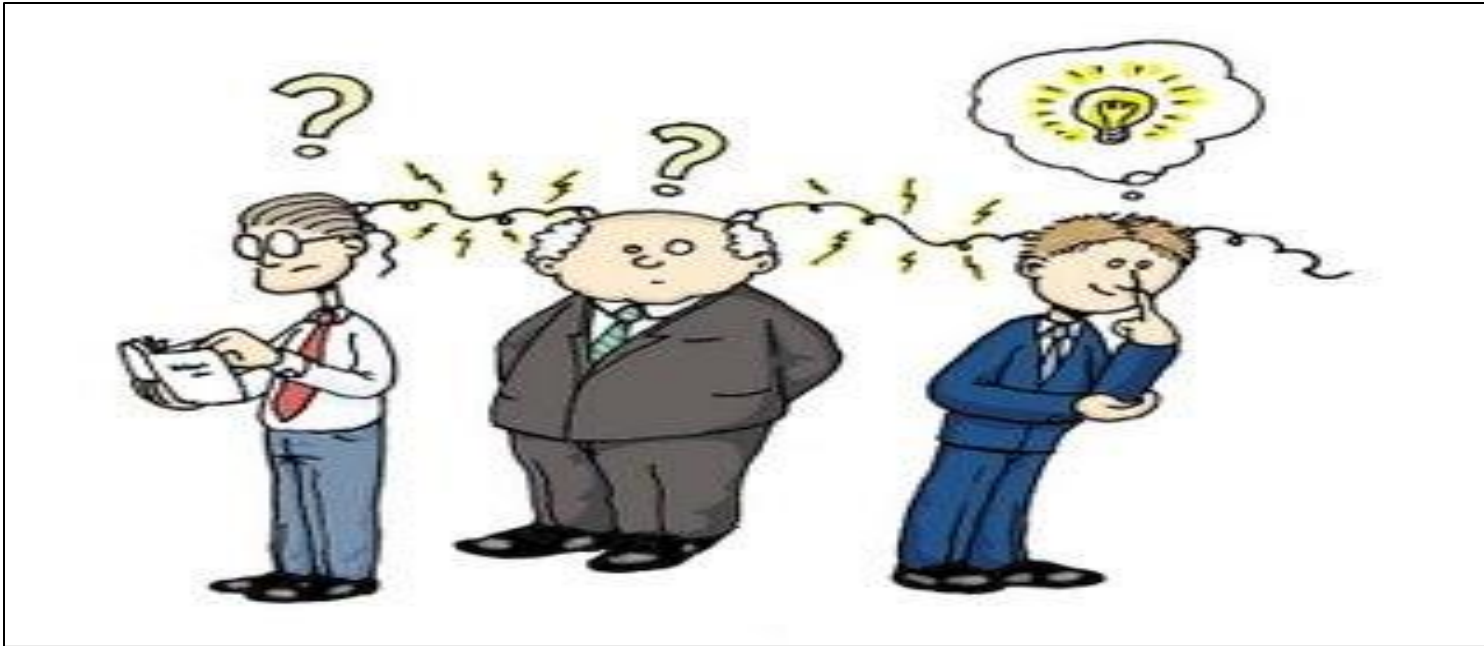
- DOK Levels **are _not_ sequential**. Students need not fully master content with Level 1 tasks before doing Level 2 tasks. In fact, **giving students an intriguing Level 3 task can provide context and motivation for engaging in the more routine learning at Levels 1 and 2.**

- DOK levels are **also _not_ developmental**. All students, including the youngest preschoolers, are **capable of strategic and extended thinking tasks.** What they look like will differ, and what is Level 3 to a kindergarten student may be a Level 1 task for a middle schooler. All students, however, should have opportunities to do complex reasoning.

To find the right balance, ask yourself these questions:

- What kinds of thinking do I want students to do routinely?

- If my own child were participating, what would I want him or her to be doing?

- What's the most effective way to spend the limited classroom time I have?

- Decide for yourself how often you should focus on tasks at each level so that students gain the most from the learning opportunities you design.

.

A B C Brainstorm

Topic:

A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P
Q	R	S	T
U	V	W	X, Y, Z

Readers Mark Their Pages To Show Their Thinking

IN

LOL Funny Part

! Surprising Part

* Important Part

THE POWER OF
Annotating

Annotating is when readers make notes and flag or highlight important details while they are reading. ◄◄◄

Focus on what they are reading.
Understand the details of a text.
Keep track of thoughts and feelings.
Keep track of important details.
Prepare for discussion.
►Prepare to write about a text.

JENNIFERFINDLEY.COM

Alphabet Log

- ❏ Present information to students asking them to listen or look for important words they can use to learn about the topic.
- ❏ Break them into groups.
- ❏ Each group draws 10 letters and a recorder for the group writes the letters down.
- ❏ Groups think of words that start with the letters they drew.
- ❏ Groups write a description of each work, use it ins a sentence, or draw a picture that represents the word.
- ❏ Groups share their words as you announce the letters.
- ❏ Then as a group they write a paragraph using as many of the words as they can about the new learning.

Hopefully, you have viewed and heard some practices in Differentiation that you can put into practice.

Start out with just one type of differentiating and see how it works.
- Maybe start with Product. Ask students to show mastery in one of 4 ways. Choose the products.
  - Choose a visual, auditory, tactile product. Then add a challenging one.

We have only scratched the surface.

Pre-Assessments
- TIERED LESSONS
- COMPACTING
- LAYERED CURRICULUM
- LEARNING STATIONS
- TASK CARDS
- TARGETED SENSES
- LITERATURE CIRCLES IN ANY CONTENT
- INDEPENDENT CONTRACTING
- FLEXIBLE GROUPING
- OPEN ENDED LEARNING
- THINKING AND INQUIRY
- STUDENTS AS PRODUCERS
- GOAL SETTING UNITS

Ways to Differentiate in Your Classroom

Please start out slow
Baby steps lead to Running

REFLECTING & WRITING
CHOICE BOARD

Popcorn Sit quietly with your eyes closed for one minute. Focus on your breathe. When you're done write about something you thought about or the first thing that pops into your mind.	**DEAR OBSTACLE** Write about a time when you overcame a fear, an obstacle or a struggle.	**FORGIVENESS** Describe a time when you forgave yourself. What did you learn from this experience?	**time & money** If you had more free time and money - what would you choose to spend it on? Why?
GROWTH What are three things you're good at? What are two things you want to get better at?	**MY PEOPLE** When you're sad, who are the people you can talk to? What else helps?	**building character** What are the top characteristics of the people you admire? How can you bring those characteristics into your own life?	**PONDER** What are some things you would like to learn more about? What fascinates you?
FINDING joy What things in your life make you smile? How can you incorporate them into your life more?	**COPING WITH STRESS** What things in your life cause you the most stress or anxiety? Can you change them? What coping strategies can you use?	**ACKNOWLEDGING FEAR** What are your biggest fears? How do your fears hold you back?	**describing** Who do you feel understands you best? How would they describe you to someone you didn't know.
BOXING MATCH Draw a picture of yourself fighting and overcoming an insecurity.	**self-care** What is your favourite self-care activity? What does it look like?	**ROSE BUDS** Write a rose, thorn and bud about your school experience. Rose means something positive that happened. Thorn is something you need help with, a challenge for you. Bud is a new idea or something to look forward to.	**one wish** You have one wish. Write the Genie with your wish and give your reasons why.

Choice boards are brain friendly. The board **should contain Level 1, 2, 3 and 4 DOK questions. Students will get to choose the questions they answer** and then Teacher could **make one Level 4 question that partners work** on to answer.

These are the products that I used most in my classroom when I taught Middle School.

Symbol-

Create a new
Symbol to encourage
Reducing, recycling, and
Reusing.
- Poster
- Labelled Diagram
- Song

Collection Collage

Use a digital camera to complete a collage of photographs showing
how the community is helping people who are in need.
- Power Point
- Zoom
- Poster
- Telecast on computer

Reader's Theater
Write, Organize, and Create Props to show how the water cycle works.
- Script
- Characters
- Props
- Sound
- Visual Aids

Critique
Critique how the world handled the Corona Virus Pandemic
- Oral report
- Labelled diagram
- Written report
- TV special

Demonstration with a Venn Diagram or a Graph
Then set up a demonstration of how the Park Board makes decisions.
Use a graph or Venn Diagram on how they choose among various projects that need to be addressed.

Debate
Choose paper or plastic
Defend why one of these
are better for the world.
Find a partner to debate with.
Facts presented
Rebuttals
Evidence Provided

Task Fifteen–Use one of the Examples

1. Choose one of the examples from the last slides. ABC chart, Annotations, Choice Board, Summary, or the Slide with lots of products to choose from OR MY SLIDE.

2. Figure out how to use one of them to ask DOK Levels 1,2,3 and 4 questions about a content you will teach this year.

3. My example is on the next slide. You choose one of the examples in question 1 and make at least 3 questions that are Level 1-2, 3, and 4.

Example for Task Sixteen - I chose a Choice Board

Choice Board –Our class just studied about gorillas , visited a zoo, and heard a speaker talk about gorillas. Choose four questions from the board to complete. Use resources we studied to give evidence to support your answers. Make sure there are Level 1, 2, 3, and 4 in your task question/answer.

Summarize a day in the gorilla life.	Draw a gorilla habitat that would be engaging for a family of gorillas.	**List details about the gorilla.**
Identify the family hierarchy of a gorilla family.	Investigate what would happen if a predator entered a gorilla territory and why.	If you were a gorilla, would your life be better in a zoo or in the wild? Explain using the resources you have been learning.
Design a habitat for a gorilla in a zoo using resources from the reading, the zoo maps, and ideas the zoo keeper talked about in our visit to the Gorilla area.	What would happen if a gorilla was loose in the zoo and no one knew it? Would it be dangerous? What system should the zoo have in place to keep people safe and the gorilla safe?	What habitat does a gorilla need to survive?

Task Seventeen Summarize Differentiation-This is my Assessment for You-Show me What you know about Differentiation. This could be a pre-assessment or Formative Assessment.

Summarizations are
The most difficult task
Many students face
even in college and job
related tasks.
**Summarize
Differentiation for me
using this pyramid.**

1 Word Synonym _____

2 word title _____

3 word sample_____

4 word definition_____

5 word Effects_____

6 word what you learned

_____

Great prompts for each line: Synonym, analogy, question, three attributes, alternative title, causes, effects, reasons, arguments, ingredients, opinion, larger category, formula/sequence, insight, tools, misinterpretation, sample, people, future of the topic Teacher will tell students what to put in each line.

Sometimes we need to think of

The Standard and how many skills are inside the standard

Complexity of the reading in the content we are exploring.

The Abstractness of some concepts

Emotional Issues that surround the content

Ethical and Moral Issues we need to be careful with.

Factors that influence Text Complexity

- Word difficulty and language structure: including vocabulary, sentence type, complexity of words or structure
- Text structure: description, chronology, sequence/procedure, cause/effect, proposition-support/problem-solution, critique
- Discourse Style and genre: satire, humor
- Background Knowledge: historical, geographical, literary references
- Level of Reasoning Required: sophistication of themes and ideas presented, abstract metaphors
- Format and Layout of Text: including how text is organized etc.,.
- Length of text

- Degree of assistance
- Degree of structure
- Required background knowledge
- Abstraction rather than concrete
- Quantity of the resources needed
- Complexity of the resources
- Complexity of the process to be done
- Complexity of the expected product to be completed

Abstractions, Depth, & Complexity

The next ADC slides show Level 3 and 4 in a new light.

Use them to create questions at a deeper level within your own units.
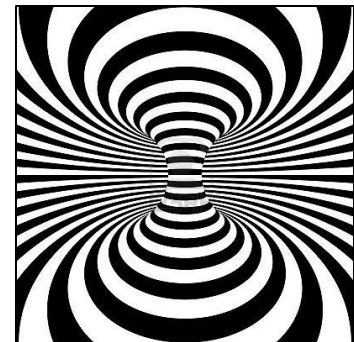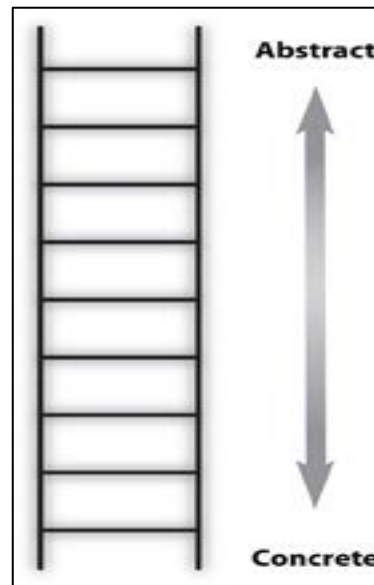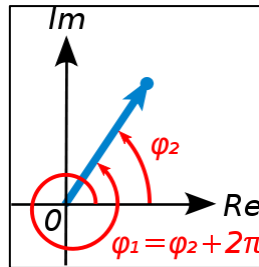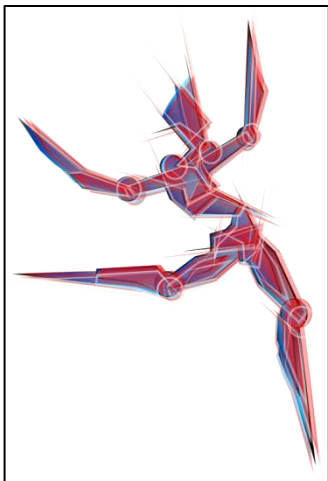
Deeper Look into ADC (Abstractions, Depth,& Complexity) Bertie Kingore

❖**Abstractions**: Includes paradoxes, symbols, metaphors, non linguistic representations

❖**Change over Time**: Ponder the past with the present as a window to trends and future implications.

❖**Essential questions**: Open ended inquiry which feeds on an abundant background knowledge.

❖**Ethics**: Action for change while considering the ethical ramifications.

❖**Generalizations**: Inferred ideas/principles beyond facts or instances. Interpret, extend or create generalization

❖**IDU**: Exploring topics across content areas

❖**Issues**: Survival, conflicts, politics, finances, nutrition, human rights, environment etc.,.

❖**Language/Terminolog**y: Use language to explain abstract relationships through metaphorical responses.

❖**Methodology**: Carrying out a process that is sophisticated in its methodology. Reasoning in reverse.

❖**Patterns**: Looking to identify recurring events, elements, behaviors, ideas by interpreting, extending or creating unexpected patterns.

- **Perspectives**: Multiple or unique viewpoints of people that respond to ideas, events, or behaviors. Reviewing the relevant data, create meaningful relationships and analyze the motivation behind the viewpoints of the people.

- **Resources and Technology**: Using references at a more sophisticated level.

What thinking skills would you pose with the ADC process?

Example Question -Hypothesize about the political debates. From your own background knowledge and viewing of the last two debates of major parties, what metaphor could you come up with to symbolize the debates.

This is a level 4 because it uses almost all of the ADC Thinking Skills in it. We are asking student to know about the debates (summarizing them in their mind or using their notes to remind them), use their own Knowledge of the last two debates (this is where their perspectives and reality come into play), and come up with metaphor (need to know what a metaphor is and how authors use them to explain things creatively) that symbolizes (need to know about symbols and what they stand for) the debates. This is a complex DOK 4 question.

Performance Assessment to Show Growth

Student name

Date

If you don't record, you can't remember.

	Below	On Grade Level	Advanced	Exceeds	Innovative	ACD –Which Areas of Differentiation	Comments
Standards							
Abstract Thinking							
Complexity							
Depth of Content							
Problem Solving							
Communication							
Extension							

Differentiation is Needed in the Tier One Classroom

Differentiate by:

❑ Content-What learning?

❑ Process-Delivery and Instruction

❑ Product –How they show mastery

❑ Learning Environment –Adjustments to accommodate learning

What and Where of Differentiation

The curriculum the students access and how they access it → **Content**

Process ← How teachers sequence the learning and the ways in which students learn

How students demonstrate what they have learned → **Product**

Environment ← How learning is structured

Adapted from Tomlinson & Maker (1982)

Questions

Usually questions at the lower levels are appropriate for:

- Evaluating students' preparation and comprehension.
- Diagnosing students' strengths and weaknesses.
- Reviewing and/or summarizing content.

Questions at higher levels are usually more appropriate for

- Encouraging students to think deeply and critically.
- Problem-solving.
- Encouraging discussions.
- Stimulating students to seek information on their own.

Product Options

Standards are mastered by how we set students up for learning.
Differentiation can help do that. Products show if students are understanding.
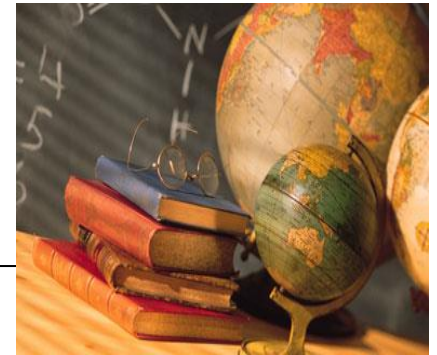
Possibilities for substituting lesson(s):

1. When the class has already read a particular work, is it possible to substitute a different work by the same author or a work from the same genre?

2. Can you substitute an author of the same time period, style, etc.?

Possibilities for extending content:

1. Journaling on a book or author under study

2. Journaling on literary elements

3. Animoto book review

4. Google docs with a group of students outside of school and summarize for whole group inside class

5. Service Learning projects

Product Options

Possibilities for enriching lesson(s):
1. Based on student Interest Survey, student selects a project from the Product List or Choice Box or Options List that they want to do. Example: Research/produce a video on a contemporary African American writer
2. Website/wiki exploring the Great Depression and the current recession
3. A Student Service Learning project related to a contemporary issue of interest to the student

Possibilities for accelerating lesson--(earlier and faster paced):
1. Students read books at the next grade level and select their own product/assessment of the books
2. Students read several of one author's books, rather than one, then select their own product/assessment

Technology Integration Ideas

There are two main reasons for providing technology integration with advanced learners:

1. Allow them <u>virtual experiences</u> in their area of interest, passion, gift, or talent that they cannot experience otherwise.

2. Allow them to practice with and create products that go <u>beyond the "pencil and paper"</u> products/assessments/depths provided in traditional instruction.

Technology Integration Ideas

- "For gifted children, there will be information available on almost any interest they have -- anything from sites such as NASA for those interested in Astronomy to sites on literature, geology, history, and Star Trek.

- Also many of these sites offer more than one-way information. Most authors cheerfully respond to email queries from their pages and will provide specific information requested.

- Next time you or your child has one of those questions which you can't find an answer, someone on the Internet probably can and will if you ask them."

- Free technology for teachers:

http://www.freetech4teachers.com/p/free-downloads.html

IRA Designs

- The next slides will show how IAR uses Common Core Standards, Depth of Knowledge, and Differentiation in their questioning.
- **It is planned out.**
  - IAR wants to see if students are mastering standards grade level to grade level.
  - It is EVIDENCE CENTERED DESIGN. They start with a Claim that have to have Evidence to support the claim and Tasks that prove the students can support their claims from the Evidence in the Content provided.
  - They start with a Master Claim that all students will be ready for College or Training in a Skill.
  - Then they design the questions from that to Major Claims that are what students should master in order to take IAR
  - The SUB CLAIMS are below which are the standards that build the foundation to get to the Major Claims.

Evidence-Centered Design (ECD) IRA

Claims

Design begins with the inferences (**claims**) we want students to know , understand and do.

Evidence

In order to support **claims**, we must gather **evidence of student learning.**

Tasks

Tasks are designed to elicit specific **evidence** from students in support of **claims.**

ECD is a deliberate and systematic approach to assessment development that will help to **establishes the validity** of the assessments and **increase the comparability** results.

IRA

Master Claim: Students are on-track or ready for college and careers

Major Claim: Students read and comprehend a range of sufficiently complex texts independently

Major Claim: Students write effectively when using and/or analyzing sources.

Students build and present knowledge through research and the integration, comparison, and synthesis of ideas.

Sub Claim: Reading Literature

RL.X.1-10

Sub Claim: Reading Informational Text

RI.X.1-10 and Reading Literacy Standards

Sub Claim: Vocabulary Interpretation and Use

RL/RI.X.4 and L.X. 4-6

Sub Claim: Written Expression

W.X.1-10 and Disciplinary Writing Standards

Sub Claim: Conventions and Knowledge of Language

L.X.1.-3

This shows how IRA begins with the END IN MIND (MASTER CLAIMS) then it shows
The MAJOR CLAIMS that will only be mastered if the SUB CLAIMS are mastered in grade level
Learning.   It all builds upon itself. The purple box shows how students will get to mastery.

PARCC Claims Structure: Mathematics

Master Claim: On-Track for college and career readiness. The degree to which a student is college and career ready (or "on-track" to being ready) in mathematics. The student solves grade-level /course-level problems in mathematics as set forth in the Standards for Mathematical Content with connections to the Standards for Mathematical Practice.

Sub-Claim A: Major Content[1] with Connections to Practices

The student solves problems involving the Major Content[1] for her grade/course with connections to the Standards for Mathematical Practice.

Sub-Claim B: Additional & Supporting Content[2] with Connections to Practices

The student solves problems involving the Additional and Supporting Content[2] for her grade/course with connections to the Standards for

Sub-Claim C: Highlighted Practices MP.3,6 with Connections to Content[3] (expressing mathematical reasoning)

The student expresses grade/course-level appropriate mathematical reasoning by constructing viable arguments, critiquing the reasoning of others, and/or attending to precision when making mathematical statements.

Sub-Claim D: Highlighted Practice MP.4 with Connections to Content (modeling/application)

The student solves real-world problems with a degree of difficulty appropriate to the grade/course by applying knowledge and skills articulated in the standards for the current grade/course (or for more complex problems, knowledge and skills articulated in the standards for previous grades/courses), *engaging particularly in the Modeling practice*, and where helpful making sense of problems and persevering to solve them (MP. 1),reasoning abstractly and quantitatively (MP. 2), using appropriate tools strategically (MP.5), looking for and making use of structure (MP.7), and/or looking for and expressing regularity in repeated reasoning (MP.8).

Sub-Claim E: Fluency in applicable grades (3-6)

The student demonstrates fluency as set forth in the Standards for Mathematical Content in her grade.

Math is the same. Students have to master grade level standards to get to the Master Claim.

- https://www.youtube.com/watch?feature=player_embedded&v=IfEU5shbmbw 10 min
Questioning –deeper level

- This is a 12th grade English Class that shows how a teacher uses QUESTIONING FOR DEEPER THINKING.

Right There Question	Think and Search QUESTION
Find it right in the reading or video	Find it by looking at several pages or illustrations to answer.
DOK 1	DOK 2
Author and Me Question	**On My Own Question**
Using background knowledge and the content to answer the question .	This is a question that they need to have more knowledge to answer it and it is more complex.
DOK 3	DOK 4

The DOK 3-4 questioning could be used in these two squares.

What did you see in this video that illustrated a quality teacher?

Comparing Traditional Assessment
to CCSS Assessment – Vocabulary

Traditional Item	CCSS-Aligned Item
What kind of figurative language is the phrase "tiny human insects" in paragraph 3? A. personification B. metaphor* C. simile D. onomatopoeia	**Why does the author use the phrase "tiny human insects" in paragraph 3?** A. To suggest that the lives of individuals are not considered important in Winesburg B. To suggest the vast contrast in size between the farmland and the farmers* C. To suggest that George's decision to leave Winesburg will not affect his life in a significant way D. To suggest the relative insignificance of farming as an occupation

(Grade 9 items based on a short story from *Winesburg, Ohio* by Sherwood Anderson*)*

RL.9.4: *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).*
RL.9.1: *Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.*

Task Nineteen-We need critical thinkers

What part of this training was new information for you?

Is there any area you need support in implementing? The ROE can help by coming to you or you can come to us. Let me know

Thank you for taking the training and send all your task answers to me prestonb@roe39.org including pre/post test.

As educators we have to think about our students as unique learners. We have to align curriculum so we know students are mastering skills year after year so that by the time they graduate, they will be ready for what the world offers academically, socially, and emotionally.

Resources

- Handbook of the Economics of Education, Volume 2 Edited by Eric A. Hanushek and Finis Welch © 2006 Elsevier B.V
- L Darling-Hammond · 2000
- Teacher Quality and Student Achievement: Recommendations for Principals November 2001 NASSP Bulletin 85(628):64-73
- Hanover Research July 20, 2022

Topic: K-12 Education, School Climate, Teacher Engagement

Related Resources

- Hess & Biggam (2004). A Discussion of "Increasing Text Complexity"[online] available:

K-8 Text Complexity link below.

- http://www.nciea.org/publications/TextComplexity_KH05.pdf

Hess (2008). Teaching and Assessing Understanding of Text Structures - Text Dependent Analysis .

- http://www.nciea.org/publications/TextStructures_KH08.pdf

- https://www.unmc.edu/mmi/training/sepa/teachers/teacher-resource-webb-bloom-taxonomy.pdf