Understanding by Design &

MTSD Curriculum Writing:





What is Curriculum?

No universal definition of the term

- Within a Country: common national program of study in public schools designed to ensure uniformity of content/standards
 - UK, Australia, France, Japan, Korea, China, Singapore, India
- Within a State in the US: common state program of study in public schools designed to ensure uniformity of content/standards
 - California, Texas, Michigan, Florida
- In New Jersey: The local school district has autonomy to create its own curriculum use of learning standards to create the why, what, when, and how in a specific area or content



Standards

- NJDOE has developed its own learning standards which describe what students should know/be able to do at specific grade levels
- These standards are called the New Jersey Student Learning Standards (NJSLS)
- 1st developed in 1996 with most recent revision in 2016
- NJ Administrative Code (law) states that these standards apply to ALL public school students and that districts must align their curriculum and instructional methodologies to assist ALL students in achieving these standards



Standards

<u>Analysis</u>

<u>Activity</u>



Reading: Literature: Grade 4: Standard 2

Determine a theme of a story, drama, or poem from details in the text:

summarize the text.



Health: Grade 8: Standard 2.1.C.2

Analyze local, state, national, and international public health efforts to prevent and control diseases and health conditions.



Social Studies: Grade 11: Standard 6.1.D.d

Compare and contrast American public support of the government and military during the Vietnam War with that of other conflicts.

What Does MTSD Create For ALL of Its Learners?

MTSD creates its own:

- Courses of Study
- Course Sequences
- Course Curriculum (why/what/when/how of learning)
 that is aligned to the NJSLS
- Instructional Minute Allocations (except for P.E)
- Textbooks and other Instructional Materials
- Classroom Lessons

SPOTLIGHT ON CURRICULUM: GUARANTEED & VIABLE

WHY DOES IT MATTER?

- Research proves that a guaranteed & viable curriculum has BIGGEST impact on student achievement compared to other school factors
- It is the basis for quality instruction
- Creates a common academic experience
- It ensures that the district is adhering to the NJ Student Learning Standards



THE IMPORTANCE OF CURRICULUM

"A guaranteed and viable curriculum is the #1 school-level factor that has the most impact on student achievement yet it is probably the hardest to implement."

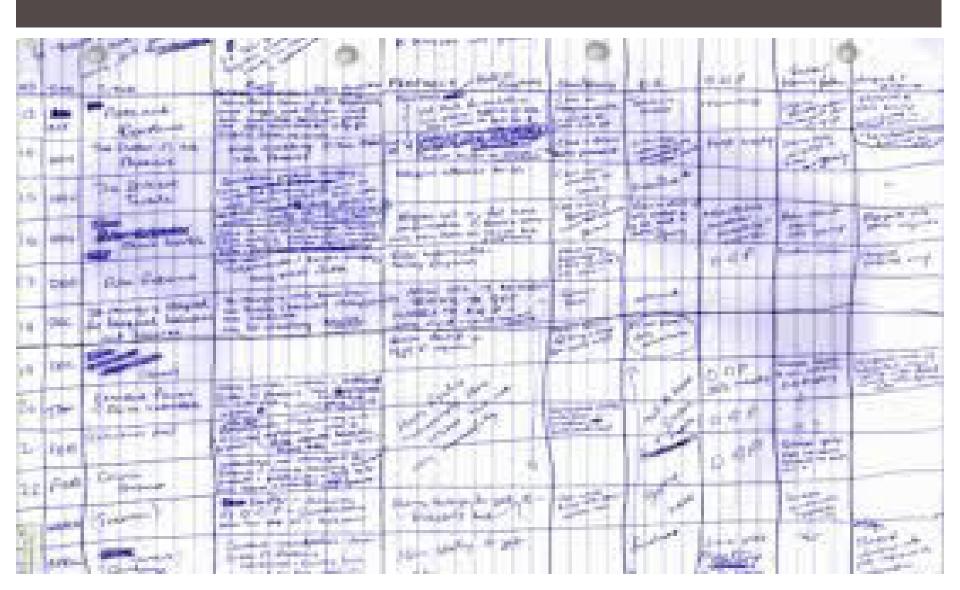
- Robert Marzano, What Works in Schools

WHERE DOES MTSD KEEP ITS CURRICULUM GUIDES?

- MTSD uses an online curriculum database warehouse called *Rubicon Atlas*
- Allows for transparency, instantaneous revisions, and vertical/horizontal mapping
- Parents/students have access through a Public Portal

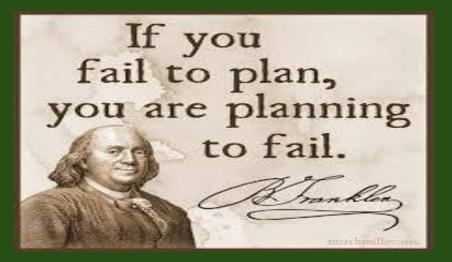


CURRICULUM WRITING IS MESSY!!!



MTSD Curricula: How is It Designed & Why?

- All MTSD Curriculum Guides use a research-based curricular framework called Understanding By Design
- Each Unit of Study in the Curriculum Guide is planned backwards with the end in mind to ensure alignment

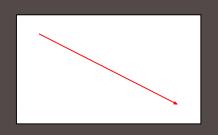




Understanding by Design

- Curricular Framework created by Wiggins & McTighe in 90s
- All MTSD curriculum guides use UBD!
- While backward design has been recognized since the 90's, it is still not a prevalent practice
- Research Supporting UBD:
 - https://drive.google.com/a/mtsd.us/file/d/0B_MBno
 - 2yeKLHRjZVb0poZ1BISDg/view?usp=sharing

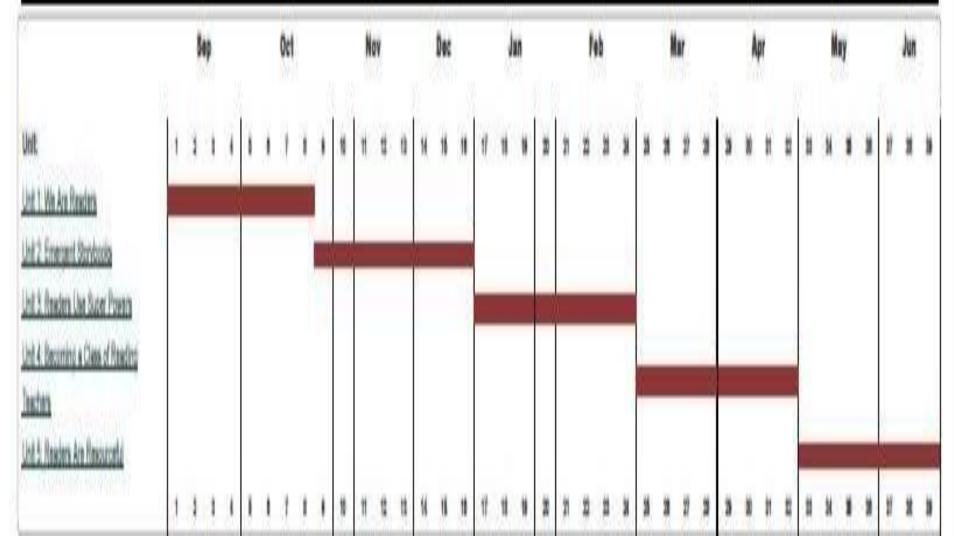
SCOPE & SEQUENCE: CURRICULUM MAPPING



- Every curriculum guide has a Scope & Sequence
- What are our Units of Study? How many Units of Study per year? per Marking Period? In what order?
- Units of Study should flow chronologically from the beginning of the year to the end of the year and should be numbered accordingly
- Curriculum maps should look like a diagonal slope

SCOPE & SEQUENCE CALENDAR





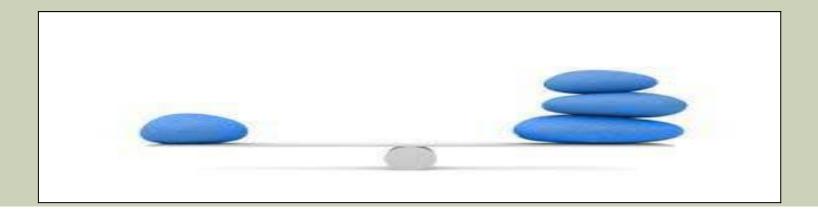
MHS CP & Honors Courses



- * MHS courses with multiple levels (General, CP, Honors) will have one curriculum guide w/one course description
- Ex: Gen/CP/Honors Biology has one curriculum guide
- The curriculum guide contains several variations of assessment, learning activities and resources but the standards, essential questions and enduring understandings for the course pertain to ALL students
- **Exceptions** are WL, Math and all AP courses

CURRICULAR UNITS: Less is More!

- Units of Study take anywhere from 4-12 WEEKS to generate solid and deep understanding of the big ideas
- Time is needed to explore/investigate/grapple w/content/skill
 - Our Guides Should Have Fewer Units per Year
 - Our Guides Should Chunk the BIG IDEAS Emphasis on:
 - Essential Questions & Enduring Understandings



EXAMPLES OF CURRICULAR UNITS WITHIN A CURRICULUM GUIDE

NJDOE Model Curriculum: Grade 9 World History

Unit I: Emergence of the First Global Age (1350-1770)

Unit II: Renaissance, Reformation, Scientific Revolution, and

Enlightenment (1350-1700)

Unit III: Age of Revolutions (1750-1914)

Unit IV: Half-Century of Crisis & Achievement (1900-45)

Unit V: The 20th Century Since 1945 (1945-Today)

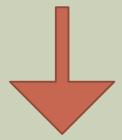
COURSE DESCRIPTION



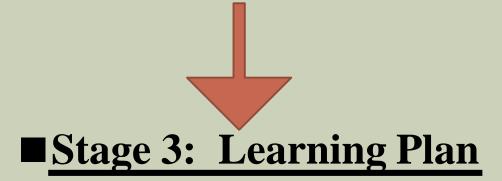
- → Each course in Rubicon Atlas must have a detailed Course Description for students and parents to view and understand
- → The course description should:
 - Provide an overview of the course
 - ◆ Make reference to the specific NJSLS that are addressed
 - ◆ Explain each unit of study in greater detail
 - ◆ List the key curricular resources/texts that students will encounter this is especially important for ELA courses in order to provide transparency to the public

EACH UBD UNIT HAS 3 STAGES:





■Stage 2: Evidence



Stage 1: Identify Desired Results (Objectives)

Stage 2:
Determine Acceptable
Evidence
(Assessment)

Then,

and only then

Stage 3: Plan
Learning Experiences
and Instruction

(Suggested Activities)

Design
backwards
from
your
long-term
goal
and

ensure

A L I G N

E

T

BEFORE & AFTER

Topic

Topic: Westward Movement and Pioneer Life (social studies - 3rd grade)

Activities

- a. Read textbook section "life on the prairie." Answer the end-of-chapter questions.
- b. Read and discuss Sarah Plain and Tall. Complete a "word search" puzzle of pioneer vocabulary terms contained in the story.
- c. Create a "pioneer life" memory box with artifacts showing what life might be like for a child traveling west or living on the prairie.
- d. PRAIRIE DAY activities: Dress in pioneer clothes and complete seven learning stations:
 - churn butter
 - 2. play 19th-century game
 - 3. send letter home w/ sealing wax
 - 4. play "dress the pioneer" computer game
 - 5. make a corn husk doll
 - 6. quilting
 - 7. tin punching

Assessments

- a. quiz on pioneer vocabulary terms from Sarah Plain and Tall
- b. answers to end-of-chapter questions on pioneer life
- c. show and tell for Memory Box contents
- d. completion of seven learning stations during Prairie Day
- e. student reflections on the unit

Stage 1 - Desired Results

Established Goal(s): GA SS4H6 The student will explain westward expansion of America between 1801 and 1861. a. describe territorial expansion with emphasis on the Louisiana Purchase, the Lewis & Clark expedition, and the acquisitions of Texas (the Alamo and independence), Oregon (Oregon Trail), and California (Gold Rush and the development of mining towns) b. describe the impact of life in America.

Understanding(s):

Students will understand that...

- Many pioneers had naive ideas about the opportunities and difficulties of moving West.
- People move for a variety of reasons for new economic opportunities, greater freedoms or to flee something.
- Successful pioneers rely on courage, ingenuity, and collaboration to overcome hardships and challenges.

Essential Question(s

Why do people move? Why did the pioneers leave their homes to head west?

 How do geography and topography affect travel and settlement?

 Why did some pioneers survive and prosper while others did not?

· What is a pioneer? What is "pioneer spirit"?

What was pioneer life really like?

Students will know...

 key facts about the westward movement and pioneer life on the prairie

pioneer vocabulary terms basic geography (i.e., the travel routes of pio-

neers and location of their settlements)

Students will be able to... • recognize, define, and

recognize, define, and use pioneer vocabulary in context

 use research skills (with guidance) to find out about life on the wagon train and prairie

express their findings orally and in writing

S

Stage 2 - Assessment Evidence

Performance Task(s):

- Create a museum display, including artifacts, pictures, and diary entries, depicting "a week in the life" of a family of settlers living on the prairie. (What common misunderstandings do folks today have about prairie life and westward settlement?)
- Write 1 letter a day (each representing a month of travel) to a friend "back east" describing your life on the wagon train and the prairie. Tell about your hopes and dreams, then explain what life on the frontier was really like. (Students may also draw pictures and explain orally.)

Other Evidence:

- oral and/or written response to one of the Essential Questions
- · drawing(s) showing hardships of pioneer life
- test on facts about westward expansion, life on the prairie, and basic geography
- · explanation of the "memory box" contents

Stage 3 - Learning Plan

Learning Activities:

(selected)

· Use K-W-L to assess students' prior knowledge and identify learning goals for the unit.

 Revise Prairie Day activities (e.g., substitute Oregon Trail 2 computer simulation for "dress the pioneer" and ask for journal entries while the simulation is played).

 Include other fictional readings linked to the identified content standards/understandings (e.g., Little House on the Prairie, Butter in the Well).

· Create a "timeline map" of a pioneer family's journey west.

Add non-fiction sources to accommodate various reading levels, such as Life on the Oregon Trail, Diaries of

Pioneer Women, and Dakota Dugout. Guide students in researching the period using a variety of resources.

Review the scoring rubrics for "memory box," museum display, letters, and journals before students begin the performance tasks. Include opportunities for students to study examples of these products.

UBD STAGE 1: Desired Results

- Which NJSLS Apply to This Unit?
- What do the Standards Actually Say?
- What Essential Questions will students explore?
- What Understandings should students make?
- What knowledge & skill will students acquire?



Selecting Content & Skill-Based Standards

- Which NJSLS Apply to This Unit?
- ❖ ADDRESSED VS. ASSESSED
- ❖ Which Skill-Based NJSLS Do We Need to Select?
 - ➤ Grades 6-12 Literacy in History/Social Studies, Science, & Technical Subjects
 - > NJSLS Standard 9 The 12 Career Ready Practices
 - Outline skills all K-12 students need to have

STAGE 1 WORK: STANDARDS

EDITING IN RUBICON ATLAS

- Select "Edit" Mode
- Click on "Choose Standards"
- Select appropriate standards
- Be VERY SELECTIVE & THOUGHTFUL!!
- ALL COURSES must select Career Ready Practices
 - Click on NJSLS: 21st Century Life and Careers
 - Then select "All Grades"
 - The 12 Career Ready Practices will appear make appropriate selections

ENDURING

<u>UNDERSTANDINGS</u>



- Summarize important ideas/concepts that are worth understanding by the end of the unit
- ➤ Big ideas that we want students to retain after they've forgotten many of the details
- Provide a larger purpose for learning the content, beyond discrete facts or skills
- > Applicable to new situations within/beyond subject
- Can span multiple units
- > POST THESE EVERYWHERE FOR ALL TO SEE!!!!!!!

ENDURING UNDERSTANDINGS QUIZ

Which Ones Are of Quality?

- > Things are always changing
- > Factors influence consumer demand
- ➤ An effective story engages the reader by setting up tensions through questions, mysteries, dilemmas, uncertainties about what will happen next
- Important historical figures and groups have made significant contributions to the development of the United States.

ESSENTIAL QUESTIONS



- Cause relevant inquiry into big ideas and core content
- > Provoke thought, discussion & more questions!
- Consider alternatives, weigh evidence, support ideas, justify answers, stimulate rethinking of assumptions
- > Spark connections w/prior learning and experiences
- > Can transfer to other situations and subjects
- Can span multiple units
- > POST THESE EVERYWHERE FOR ALL TO SEE!!!!!!!

ESSENTIAL QUESTIONS QUIZ

Which Ones Are of Quality?

- In what ways does art reflect, as well as shape, culture?
- ➤ What is six times seven?
- > What is the chemical symbol for mercury?
- ➤ When did the main character begin to suspect his former friend?

ESSENTIAL QUESTIONS

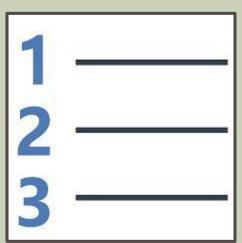
<u>Unit on African Kingdoms - What is Wrong?</u>

- How is the past still with us?
- How does geography influence culture and history?
- How were religious beliefs important cultural and historical factors?
- How can an individual change the course of history?

STAGE 1 WORK: EUs & EOs

- Select "Edit" Mode
- List both using **NUMBERS** (EU1, EU2, EU3)
- Remember their definitions from previous slides
- Can/should span MULTIPLE UNITS across year





CONTENT KNOWLEDGE

- What content students should KNOW and understand
 - about the unit according to the standards
- > What details students can explain to others
- Examples:
 - Life-cycle patterns of insects, plants, mammals
 - Specific food chain within each region
 - Characteristics of desert, forest, pond, and ocean environments, including climate and natural resources



STAGE 1 WORK: Content

- Select "Edit" Mode
- List in <u>NUMBER FORMAT</u> in the approximate chronological order that it will be addressed in the unit
 - 1. Blah
 - 2. Blah
 - 3. Blah
 - 4. Blah



1	
2	
3	

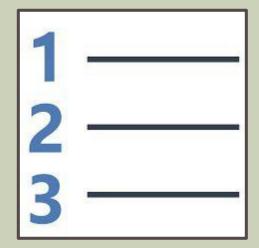
SKILLS



- What students should be able to DO through acquisition & practice as they work w/content
- Contain processes & procedures students will possess to allow them to apply knowledge gained
- Should begin with an <u>action verb</u>
- **Examples:**
 - > <u>USE</u> graphic organizers to record and analyze data
 - > <u>APPLY</u> understandings to design.....
 - > <u>DEVELOP</u> a well-reasoned hypothesis

STAGE 1 WORK: Skills

- Select "Edit" Mode
- List Skills in **NUMBER FORMAT**
- Begin each skill w/an Action Verb





UBD STAGE 2: ASSESSMENT

Evidence Needed to Determine Student Achievement

- Each Unit of Study in a Curriculum Guide contains a well-constructed comprehensive <u>assessment plan</u>
- This provides continuous, coherent, and high-quality information on student performance that we then use to improve teaching and learning
- At the heart of this plan is a clear understanding of and alignment to Stage 1 of the Unit - the standards, EQs and EUs should be central to all assessments & instruction

MTSD ASSESSMENTS:

Internal Assessments:

Formative Assessments

- Created by teachers
- Given as learning is being formed during a unit of study
- Purpose is to gather feedback that can be used to guide improvements in the ongoing teaching and learning

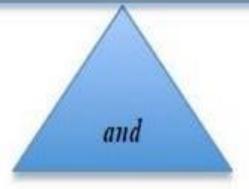
Summative Assessments

- Created by teachers
- Given after portion of unit or entire unit is complete
- Purpose is to measure the level of success obtained at the end by comparing it against the standards addressed in the unit

	Type of Assessment	
	"Assessment for Learning"	"Assessment of Learning"
Dimension	Formative	Performance Summative
Purpose	 Instructional 	 Instructional and Managerial uses Instructional and Managerial Uses
Implementation	 Driven by moment-to- moment decisions; generated by teacher 	 Regulated by curricular units of study, developed before any instruction occurs, usually externally generated
Timing	During instructionHigh frequency	 After instruction or during a break in instructional flow Low frequency Low frequency
Scope	■ Narrow	■ Broad ■ Broad

Instructional Agility

Precision Flexibility



- Standards
- Learning Progressions
- Assessment Maps
- Error Analysis
- Quality Questions
- Sufficient Evidence
- Accurate inferences

- Instructional Tool Kit (teaching and re-teaching)
- Differentiation Strategies
- Malleable Curriculum
- Educational Triage -Prioritization Skills

C. Erkens, T. Schimmer, & N. Vagle, 2015

UBD STAGE 2: ASSESSMENT PLAN

Evidence Needed to Determine Student Achievement

All Courses in Grades 3-12:



every unit will contain <u>either</u> a Performance Assessment or Summative
 Assessment of some kind

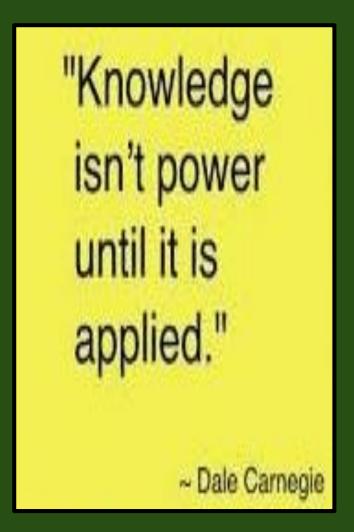
Math/ELA/Science/SS in Grades 5-12 & World Lang in Grades 7-12:

- every unit will contain <u>either</u> 2 Performance Assessments or 1
 Performance Assessment and 1 traditional End-of-Unit Summative
 Assessment
- The <u>ANCHORS</u> of the Units of Study in a Curriculum Guide will make up/determine the <u>LARGE MAJORITY</u> of a Student's Report Card Grade

Week	Big Ideas	Big Ideas	Big Ideas		
1	Monday Views of Prejudice & Genocide (FA)	<u>Wednesday</u> Views of Prejudice & Genocide (FA)	<u>Friday</u> Views of Prejudice & Genocide (FA)		
2	<u>Tuesday</u> Prelude to the Holocaust (FA)		<u>Thursday</u> Prelude to the Holocaust (FA)		
3	Monday Prelude to the Holocaust (FA)	<u>Wednesday</u> From Persecution to Mass Murder (FA)	Friday From Persecution to Mass Murder (FA)		
4	<u>Tuesday</u> Performance Assessment		<u>Thursday</u> Performance Assessment		
5	Monday Resistance, Intervention & Rescue (FA)	Wednesday Resistance, Intervention & Rescue (FA)	<u>Friday</u> Resistance, Intervention & Rescue (FA)		
6	<u>Tuesday</u> Issues of Moral Responsibility (FA)		<u>Thursday</u> Issues of Moral Responsibility (FA)		
7	<u>Monday</u> Issues of Moral Responsibility (FA)	<u>Wednesday</u> Unit Review	Friday End-of-Unit Summative Assessment		
8	Tuesday Assessment Analysis & Corrections		<u>Thursday</u> Buffer		
9	<u>Monday</u> Buffer	<u>Wednesday</u> Buffer	Friday Buffer		
	SAMPLE: STRATEGICALLY PLACE ANCHORS IN EACH UNIT!!!!!				

Performance Assessments: A New Kind of Summative Assessment

- In a Performance Assessment, students authentically perform to demonstrate understanding in a scenario
- Doing so allows for an increased focus on deeper learning and greater complexity





A Performance task asks students to . . .

- Construct a RESPONSE
- Create a PRODUCT
- Perform a DEMONSTRATION

www.jaymctighe.com

A Performance task

- authentic and provides meaning and creates an urgent need for the learning
- brings out different aspects of understanding and involves analysis, synthesis and evaluation
- usually no a single correct answer / solution
- evaluated by a rubric to provide feedback
- uses GRASPS to frame the scenario

G = Goal:

the objective, the task, the problem/challenge and the obstacles that may have to be overcome

R = Role:

who are they, what have they been asked to do, and or what is their job

A = Audience:

who are the clients or who is the target audience

S = Situation:

what is the context and the challenge involved

P = Produce, Performance, and Purpose
what are they creating in order to ...
what are they developing so that ...

S = Standards and Criteria for Success:

The performance / product must meet X Y Z standards
The work needs to ... or will be judged by ...

WHY PERFORMANCE ASSESSMENTS? THINGS FOR EDUCATORS TO CONSIDER

- Performance tasks assess both critical higher order thinking skills
 AND content knowledge
- 2. PTs require students to analyze, explain and write their OWN solutions to complicated problems
- 3. PTs are generally more popular w/students: they like this type of test b/c it is a method of evaluation which is more interesting and relevant than other assessments (they don't see it as a test!)

http://connectedprincipals.com/archives/6201

MORE ON PERFORMANCE TASKS

- Should count for a substantial portion of the MP grade
- Do not confuse with classroom activities or Fluff Projects they are neither!
- If a PT looks like fluff, it is due to a design flaw
- PTs are much more involved & should be done in school in a test-like atmosphere to authenticate the learning process
- Research-Base:
 - http://www.edutopia.org/blogs/tag/performance-assessment
 - https://drive.google.com/a/mtsd.us/file/d/0B_MBno2yeKLHMVVBWDJFaWRyd3c/view?usp=sharing
 - https://drive.google.com/a/mtsd.us/file/d/0B_MBno2yeKLHYURfQjludDR4RzQ/view?usp=sharing

BEFORE



AFTER

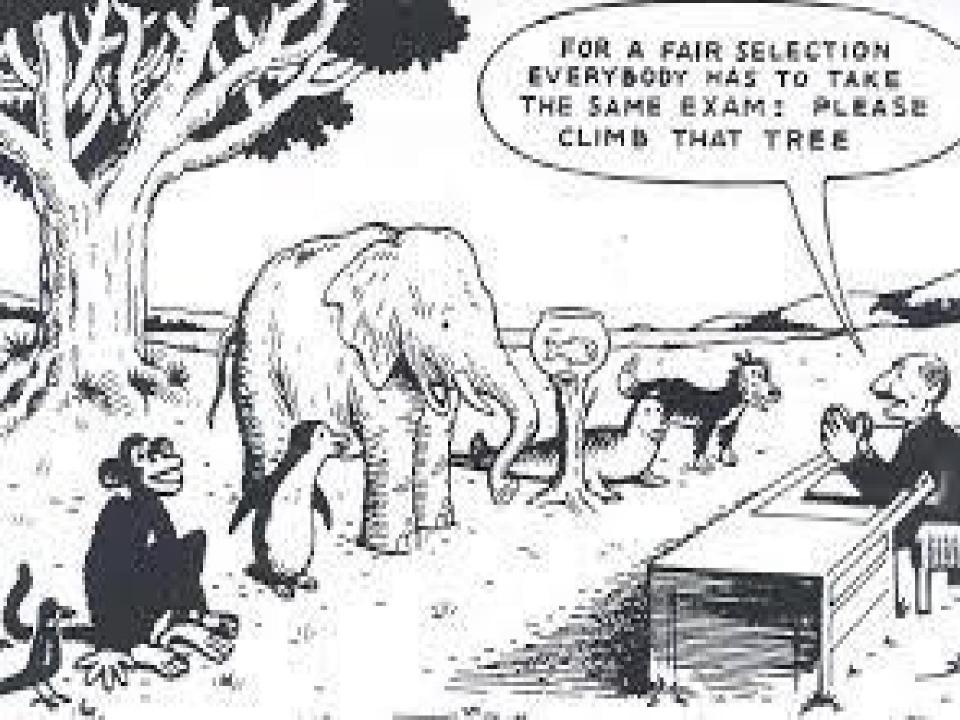
Unit 2 Performance Assessment: Matter, Energy & Change

[Assessment Time: 1 Block Only]

 Develop an experiment to prove or disprove if an energy transfer occurs when the rings are combined with 150 mL of room temperature water to form a system.

Materials:	als: timer, digital thermometer, 8 metal rings on a string, 150 mL of room temperature water in a beaker, ice water	
Info: The metal rings are tied together with a string and submerged in ice water. The water in the small beaker is temperature.		
Analysis:	Present your evidence in all of the following forms below: a) data table graph; written explanation.	

a. Data Table	b. Graph	
		0,-
c. Prove or disprove this claim with evidence: An energy transfer occurred when the mater	ials were combined to form a system.	



PERFORMANCE ASSESSMENT EXAMPLES

■DEFINED STEM

- Jay McTighe
- PT Resource Page

PERFORMANCE ASSESSMENTS IN RUBICON ATLAS

- In Stage 2, go to **Performance & Summative Assessment Box**
- Click on "Add New Assessment"
- Type in the name as follows:
 - Course Name/Level, Unit #, Performance Assessment
 - (i.e. Physics H Unit 1 Performance Assessment)
- Select the Assessment Method
- Select <u>Assessment Method</u> (Performance Assessment) from drop down
- Briefly describe the Performance Assessment in the Text Box
- Attach the Assessment & Rubric by clicking on "Add an Attachment"
- MUST DO!!!! Select standards that align w/Performance Assessment

END-of-UNIT SUMMATIVE

ASSESSMENTS



- The more traditional end-of-unit summative assessment is, in some cases, <u>THE</u> culminating activity of the unit
- Questions to consider:
 - 1. Is the assessment aligned to the standards? Consider whether the assessment will actually measure what it is supposed to measure.
 - 2. Are the assessment items and/or expectations appropriately rigorous (DOK levels aligned to standards) and have an appropriate level of difficulty?

WEBB'S DEPTH OF KNOWLEDGE (DOK)

- A scale of cognitive demand (thinking) to align standards with assessments - based on research of Norman Webb, University of Wisconsin Center for Education Research

 WebbAlign®
- Provides a vocabulary and frame of reference when thinking about our students and how they engage with the content
- DOK offers a common language to understand "rigor," or cognitive demand, in assessments, as well as curricular units, lessons, and tasks
- http://schools.nyc.gov/Academics/CommonCoreLibrary/ProfessionalLearning/DOK/default.htm

Why Depth of Knowledge (DOK)?

Mechanism to ensure that the intent of the standard and the level of student demonstration required by that standard matches the assessment items



To ensure that teachers are teaching to a level that will promote student achievement

Webb's Four Levels of Cognitive Complexity



Level 1: Recall and Reproduction

Level 2: Skills & Concepts

- Level 3: Strategic Thinking
- Level 4: Extended Thinking

Webb's Depth of Knowledge

How can the knowledge be used?

DOK 2

Basic Application of Skills and Concepts

How does / did it happen?

How does / did it work?

How is / was it used?

Why can the knowledge be used?

DOK 3

Strategic Thinking

Why?

Why did it happen?

How can you use it?

Why can you use it?

What is the cause?

What is the effect?

What is the reason?

What is the result?

What else can be done with the knowledge?

DOK 4

Extended Thinking

What is the impact? What is the influence?

What is the relationship?

What if?

What would happen?

What could happen?

What do you believe / feel / think?

What can you create / design / develop?

What is the knowledge?

DOK 1

Recall & Reproduction

Who?

What?

Where?

When?

How?



DOK...



- Is NOT a taxonomy (Bloom's) & Is NOT the same as "difficulty"
- Is NOT about using "verbs" but rather about the context in which the verb is used and the depth of thinking required
- 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 even if the student has to use addresses or landmarks, the student is doing nothing more than recalling and reciting
- What comes after the verb is more important than the verb itself
- "Analyze this sentence to decide if the commas have been used correctly" does not meet criteria for high cognitive processing

Same Verb...Different DOK

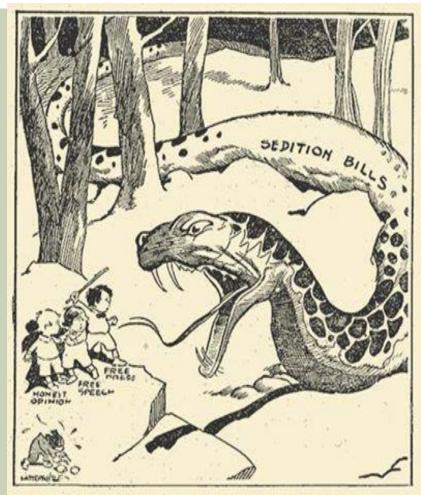
- **DOK 1-** <u>Describe</u> three characteristics of metamorphic rocks. (Requires simple recall)
- DOK 2- <u>Describe</u> the difference between metamorphic and igneous rocks. (Requires cognitive processing to determine the differences in the two rock types)
- DOK 3- <u>Describe</u> a model that you 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)

Determine the Rigor of this Item

Examine the following political cartoon and answer the following questions.

1. What does the snake in this cartoon represent?

2. Whom is the snake attacking?



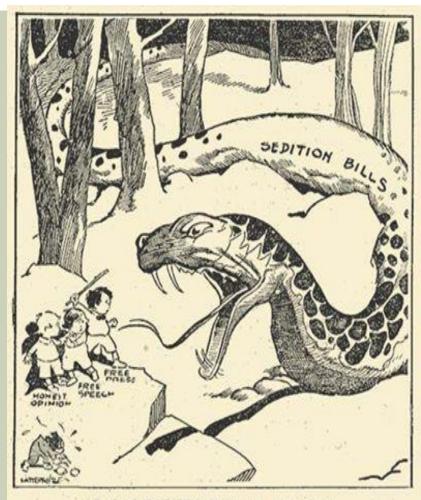
AS GAG-RULERS WOULD HAVE IT.

—Satterfield in the Jersey City Journal.

Determine the Rigor of this Item

Examine the following political cartoon. Use **details** from the cartoon to:

- 1. Explain the symbolism of the snake in the cartoon.
- 2. Hypothesize why the artist used children to represent free press, free speech, and honest opinion.



AS GAG-RULERS WOULD HAVE IT.

—Satterfield in the Jersey City Journal.

COMMON SUMMATIVE ASSESSMENTS & DOK LEVELS

- Newest standards feature an increased focus on deeper learning
- Ex. Analyze, synthesize, compare, connect, critique, hypothesize
- This transformation requires a curriculum & assessment overhaul
- Approx. 70% of ELA & Math PARCC questions are DOK Levels 2-4
- Studies in 17 states found that only 2% of Math and 21% of ELA items on teacher created assessments reached higher DOK levels
- PARCC and AP exams are also moving away from forced choice questions (T & F, Multiple Choice) b/c they can't assess higher DOK
- No current AP exam is made up of more than 50% forced-choice
- Therefore, our MTSD assessments should follow suit

COMMON SUMMATIVE ASSESSMENTS & DOK LEVELS

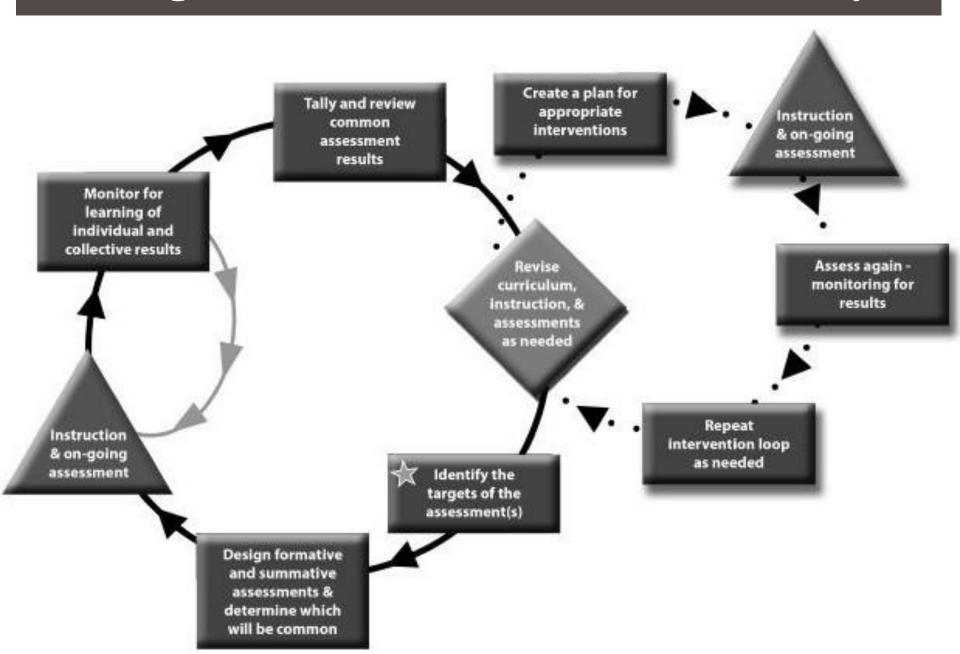
Research Base:

- https://drive.google.com/a/mtsd.us/file/d/0B MBno2yeKLHSEwtQU5P Rm5IQ2c/view?usp=sharing
- https://drive.google.com/a/mtsd.us/file/d/0B MBno2yeKLHcFQ2bks5dk REbk0/view?usp=sharing
- https://apstudent.collegeboard.org/apcourse

DOK LEVELS & POINT VALUES ON SUMMATIVE & PERFORMANCE ASSESSMENTS

- → Be sure to note point values for all questions on the Summative Assessment
- → DOK Level 1 items should have the lowest point value
- → DOK Level 2-4 items should be worth more
- → With End-of-Unit Summative Assessments, the following parameters will ensure proper use of DOK levels:
 - ◆ AT LEAST 50% of grade value must rest in DOK 2-4
 - ♠ Maximum of 50% of the assessment can use forced-choice response questions

Using Summative Assessments Formatively



<u>Using Summative Assessments Formatively</u>

- Those who administer the assessment must then collaboratively examine the results for consistent scoring and shared responses that address the following:
 - Error analysis & intervention planning for individual learners
 - > Curriculum, instruction, and/or assessment modifications
 - What is it we expect them to learn?
 - How will we know when they have learned it?
 - How will we respond when they don't learn?
 - How will we respond when they do learn? DuFour, Eaker, & DuFour, 2010

SUMMATIVE ASSESSMENTS IN RUBICON ATLAS

- In Stage 2, go to **Performance & Summative Assessment Box**
- Click on "Add New Assessment"
- Type in the name as follows:
 - Course Name/Level, Unit #, Summative Assessment
 - (i.e. Physics H Unit 1 Summative Assessment)
- Select the Assessment Method
- Select <u>Assessment Method</u> (Summative Assessment) from drop down
- Briefly describe Summative Assessment in the Text Box
- Attach the Assessment by clicking on "Add an Attachment"
- MUST DO!!!! Select standards that align w/Summative Assessment

FORMATIVE ASSESSMENTS IN RUBICON ATLAS

- FAs are given to gauge learning of individual students in your class
- FAs are given throughout a unit of study
- They vary greatly in type and there is no set # per unit
- One teacher may need to formatively assess more than another teacher or may need to give different FAs - both are perfectly fine
- FAs carry little point value because the learning is <u>still being formed</u>
- In Rubicon Atlas Stage 2, go to Formative Assessments Box
- This is an ordinary text box
- List a sample of **some** of the Formative Assessments that will be administered in the unit of study
- Number each Formative Assessment
- Briefly describe each Formative Assessment afterwards
- **Example:** 1. Catcher in the Rye Formative Assessment short quiz given at the end of Chapter 4 to check for understanding

UBD STAGE 3: Learning Plan



UBD STAGE 3:Suggested Calendar Map

- Calendar Map to match proposed length of Unit (9 weeks, etc.)
- Schedule "Buffer Time" at the end of Unit for Flexibility
 - Life Happens: absences/assemblies/field trips/emergencies
 - Education Triage: re-teaching/re-testing necessary
- List <u>Big Ideas</u> and when they will be addresses
- Big Ideas should span multiple days, if not weeks
- Strategically place Performance Assessment in the Unit of Study
 - Administered during break in instructional flow of the unit?
 - Will it be the culminating assessment of the unit?
 - Which Big Ideas will it assess? All? Some?
- Allow flexibility in administration of Performance Assessment
- Same holds true for the End-of-Unit Summative Assessment

UBD STAGE 3:Suggested Learning Activities

- List <u>SUGGESTED</u> Learning Activities in approx. chronological order that will provide guidance for differentiated learning experiences that will lead to achievement of Stage 1 & 2 for <u>ALL LEARNERS</u>
- Common Learning Activities from one classroom to the next are <u>RARELY APPROPRIATE</u> as each classroom is made up of different students with different needs and interests
- Include all possibilities of student choice for example, if a Reading Unit has 1 mentor text and 4 student choice texts, explain that in the learning activities

<u>DIFFERENTIATION WITHIN UBD</u>

"Color Key" to differentiation in backward design

Should be Differentiated

May need some Differentiation

Should rarely be Differentiated

STAGE 1: DESIRED RESULTS		
Standards		
Enduring Understandings	Essential Questions	
Content Knowledge		
Skills		
Key Terms		
STAGE 2: ASSESSMENT EVIDENCE		
Performance Tasks and Other Assessments		
STAGE 3: LEA	ARNING PLAN	
Common Learning Activities		
Individual Learning Activities		
Unit Resources		
Unit Reflections		

UBD STAGE 3:

Resources

Unit Resources - anything <u>REQUIRED</u> for all students to access/read/examine as part of the learning activities (mentor texts, primary sources, required videos, etc.)



MTSD CURRICULUM: District Responsibility



- NJ Administrative Code 6A:8-3.1:
 - Districts <u>ARE RESPONSIBLE FOR</u> the review and continuous improvement of all curriculum based upon changes in knowledge, technology, assessments, and modifications to standards
 - Guides must contain 21st Century skills, pacing guides, instructional materials and benchmark assessments

UNIT REFLECTIONS

- One of the reasons why curriculum is so challenging is that it is never done
- Once the team has developed the curriculum, it is imperative that processes are in place to ensure that the teaching and learning in the content area is helping students achieve
- Buying a Car
- Good Problems



MTSD CURRICULUM: Unit Reflections

CRITERIA	QUALITY	UbD STAGE 2: Reflections & Revisions: What Worked & What Needs to be Fixed?
Formative Assessments	Unit includes numerous formative assessments designed to measure student progress	■ 22 y y p. 12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Performance Assessment	Performance Assessment in which students demonstrate understanding in an authentic situation Students apply learning in context Standards-based rubric w/clear criteria	
Summative Assessment	Comprehensive end-of-unit summative assessment Maximum 50% forced choice response Maximum 50% DOK Level 1 questions Every question clearly aligned to NJSLS, EUs and EQs	

THE MTSD CURRICULUM CYCLE

1.) District
Administration &
Teachers Determine
Need for Curriculum
Writing

6.) Teachers instruct, reflect and capture feedback, which is then collected/evaluated for areas of growth in the future 2.) Writing Positions Posted,
Teachers Apply, Selected,
BOE-approved, Trained >
then Write Each Unit, Create
Assessments, Performance
Tasks & Activities

5.) Teachers Plan HOW they will instruct

4.) Adopted Curriculum is Published to Teachers, Students & the Public

3.) Curriculum is Reviewed/Revised by Administration and Adopted by BOE