

Moving from Traditional to Creative Assessments?

Steal These!

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Mr. Klavetter on Assessment

- Standardized test data can be very useful and practical for constant improvement.
- “Teaching to the test” and using a textbook are not necessary for authentic increases in student achievement.
- We must start with big, complex, curiosity provoking problems that blur the line between assessment and instruction.

Mrs. Walker on Assessment

- “How much do students really love to learn, to persist, to passionately attack a problem or a task? ... to watch some of their prized ideas explode and to start anew? ... to go beyond being merely dutiful or long-winded? Let us assess such things.” (Grant Wiggins)
- “If we want students to succeed, embrace learning and exercise their minds, we need to look at assessment from all angles.”
- Three Levels of Assessment: Assessment of Learning, Assessment for Learning, and Assessment as Learning (Lorna Earl’s book *Assessment as Learning, Using Classroom Assessment to Maximize Student Learning*)

Mr. Berzinski on Assessment

- Not a test giver; inquiry based learning and assessment: looks for the ability to connect a historical event even to where we are today; how did get to where we are right now?
- Debates that fire them up - sign up on the *yes* side or *no* side (then assess the ability to cite concrete supportive historical information)
- No multiple choice - writing and the ability to argue is central- there is not social studies standardized test, but there is the critical importance of reading, writing, and thinking

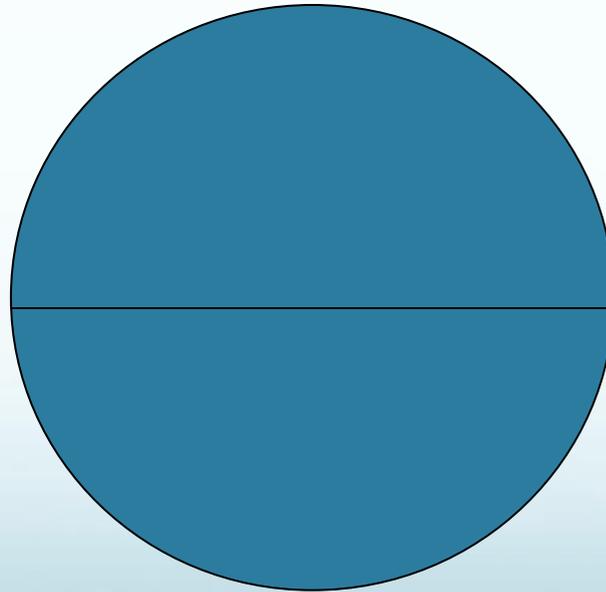
Assessment in Math

The Good, the Bad, and the Ugly

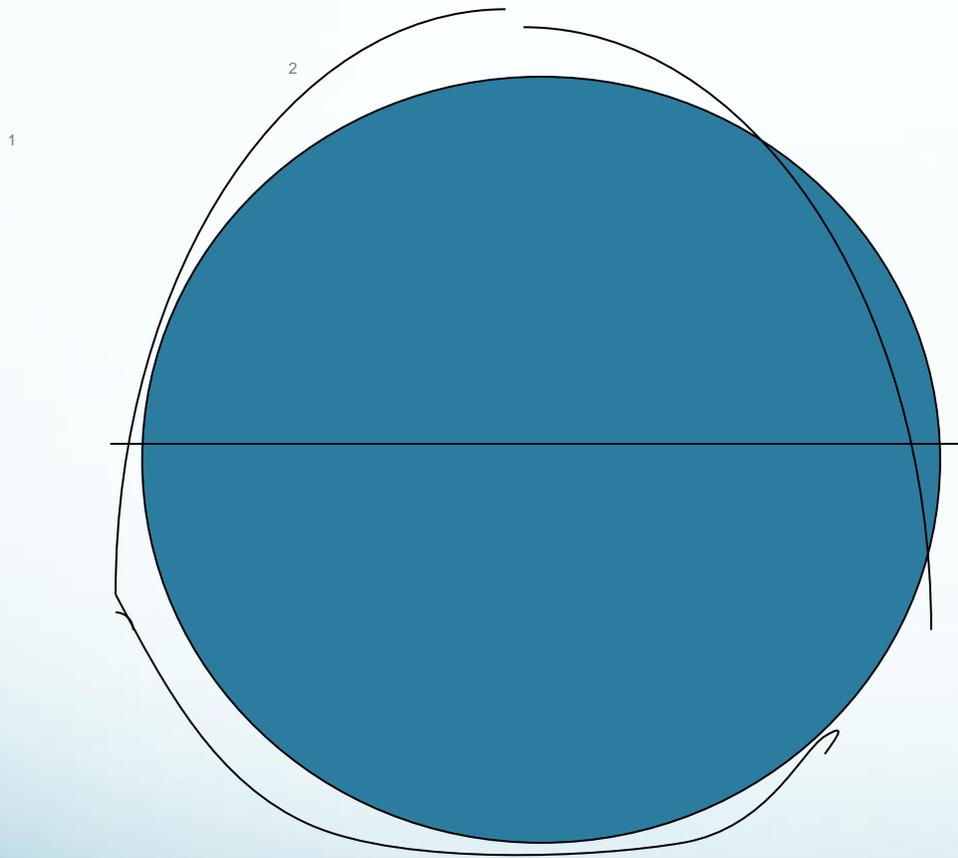
- ***The Good:*** Getting at the meaning, teaching concepts
- ***The Bad:*** Memorization and plugging in numbers
- ***The Ugly:*** When students can't critically think to create a reasonable response if the formula, rule, or procedure is forgotten

Traditional Assessments: Finding the circumference of a circle

- Use the formula for circumference of a circle to determine the volume of the circle below. Circumference of a circle = $2\pi r$ or πd . The diameter of circle is 8 inches. What is the circumference?



Conceptual Understanding



- You just completed a task list that asked you to use string to find the relationship between the distance across a circle, when a line passes through the center, and the distance around the outside of a circle. Explain how this activity shows the meaning of the formula for finding circumference of a circle.

Traditional Tests, operations with fractions

Traditional: Students use rules to solve

1. $\frac{1}{4} + \frac{3}{8} =$

2. $2\frac{1}{2} \div \frac{1}{4} =$

3. $\frac{13}{15} - \frac{1}{5} =$

4. $6 \times \frac{1}{3} =$

Conceptual Understanding

Red		White	
White		White	
Red	Red	White	White
Red	White	White	White

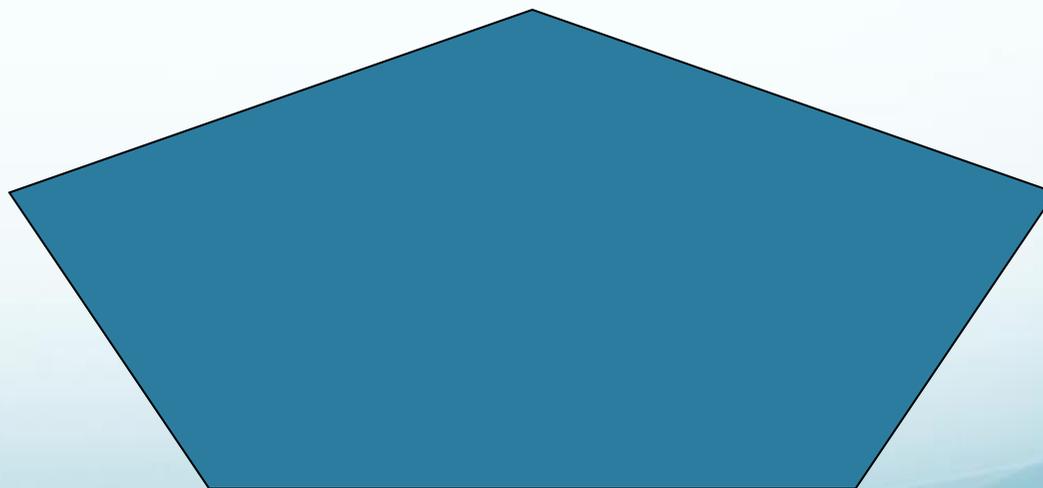
$$\begin{array}{r} 1 \\ + \\ 3 \\ \hline 4 \end{array} + \begin{array}{r} 3 \\ + \\ 5 \\ \hline 8 \end{array} =$$

Traditional Assessment: finding the degrees in the angles of a polygon

- Find the total degree of the angles in the following polygon. Remember that the formula is

$$(S - 2) 180 =$$

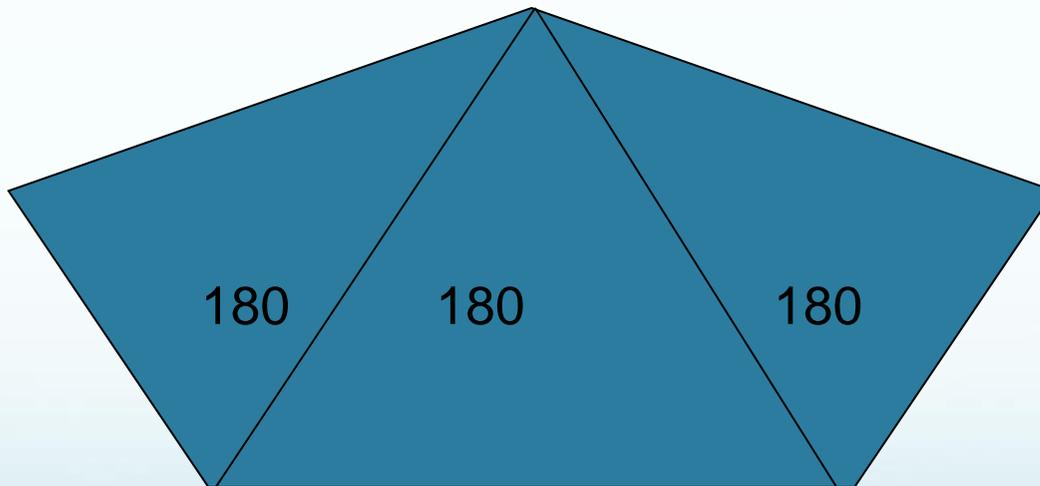
- “There is a formula...”



Conceptual Understanding

Knowing that every polygon can be broken into triangles, and if the lines to make the triangles are drawn from corner to corner, there will always be 2 fewer triangles than sides.

(Or...they can break a figure into quadrilaterals and triangles and calculate total angles by adding the “360s” and the “180s.”)



Think time!

In the examples you have seen here,
where did you see

1. critical thinking

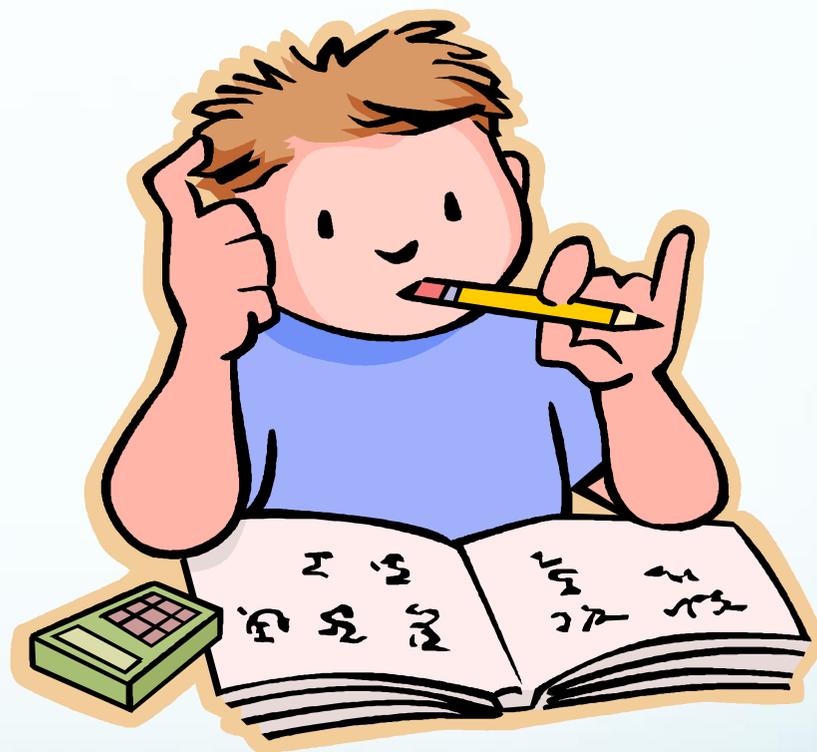
2. creativity

3. collaboration

in the assessment experience and/or,
where could it be added?

The Bottom Line

Students who understand the concepts behind math **BEFORE** they learn the rules, formulas, and other shortcuts can back up to the meaning behind the math to solve problems.



Assessment in Science

The Good, the Bad, and the Ugly

- ***The Good:*** Getting the chance to use scientific reasoning to explain your understanding of the concepts.
- ***The Bad:*** Selecting an answer just because you recognize it.
- ***The Ugly:*** When you learn to hate science because you have never been given the opportunity to explore your curiosity.

Traditional Assessment

Animal Adaptations: What Are They? **Post-Test Directions:** This quiz will help you find out how much you have learned about adaptations and how they help animals to survive. Complete the following sentences by filling in the blanks with words from the list at the bottom of the page. Note that some of the terms may be used more than once.

1. _____ is the blending of animals into their surroundings
2. Carnivores prefer to eat _____ .
3. Adaptation is a matter of chance, not _____ .
4. When we talk about adaptation we are talking about _____ .
5. Along with their bodies, animals' _____ also can adapt.

behavior choice plants reflex survival camouflage
meat warning coloration relaxing vegetables

What do you think?

What are some instructional strategies you might use to teach students about animal adaptations, behaviors, and habitats?

How might you assess this content in a creative, authentic way?

Conceptual Understanding

Problem: With the issue of global warming impacting all animal habitats around the globe, the current habitat of a coniferous forest in the mountains is likely headed toward warmer temperatures. This animal must be able to live in temperatures that range from zero to 90 degrees. There are often large drifts of snow in the winter months. Precipitation tends to be less in the summer months, sometimes lacking rain for 4 weeks straight. The primary predators of this animal are mountain lions and coyotes.

Design brief: Design a new species of animal that could survive and thrive in this environment. Be sure to consider both the structural and behavioral adaptations that would be needed.

Behavioral Adaptations

Structural Adaptations

On the back side of this paper draw a picture of your new animal species and describe in a few sentences how its behaviors would help it to survive.

Traditional Assessment

Fill in the blank with the correct simple machine.

These two parts act as one simple machine. They roll and are found on cars, bikes and wheelbarrows. _____

A rope, a wheel with a groove in it and a weight make up this simple machine. You can pull down on the rope to lift the weight. _____

This simple machine can be used to lift a weight. It has a fulcrum, or pivot point, which can be located in the center, near the end or at the end of this simple machine. _____

Conceptual Understanding

screw			
wedge			
incline plane			
wheel and axle			
gear			
lever			
pulley			

Walk around the our classroom, the library, and the gymnasium to find examples of simple machines. You can write them or draw them. Then, in the second box, tell why they belong in the category you chose.

Traditional Assessment

1. When a rock splits, it is caused by

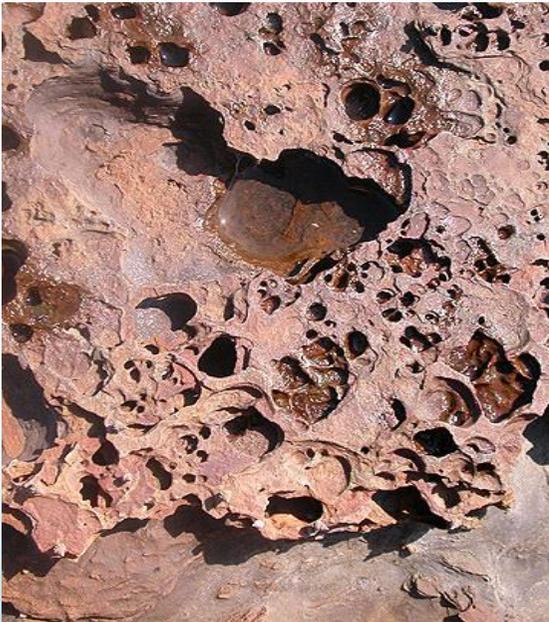
- a. physical weathering
- b. chemical weathering
- c. erosion
- d. all of the above

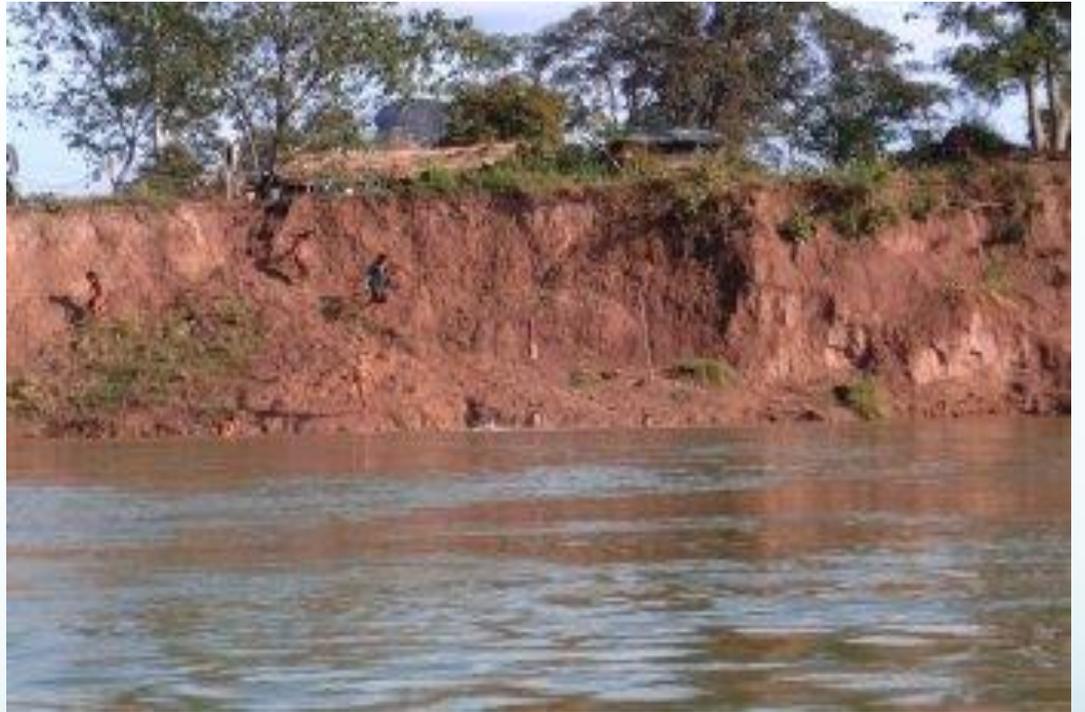
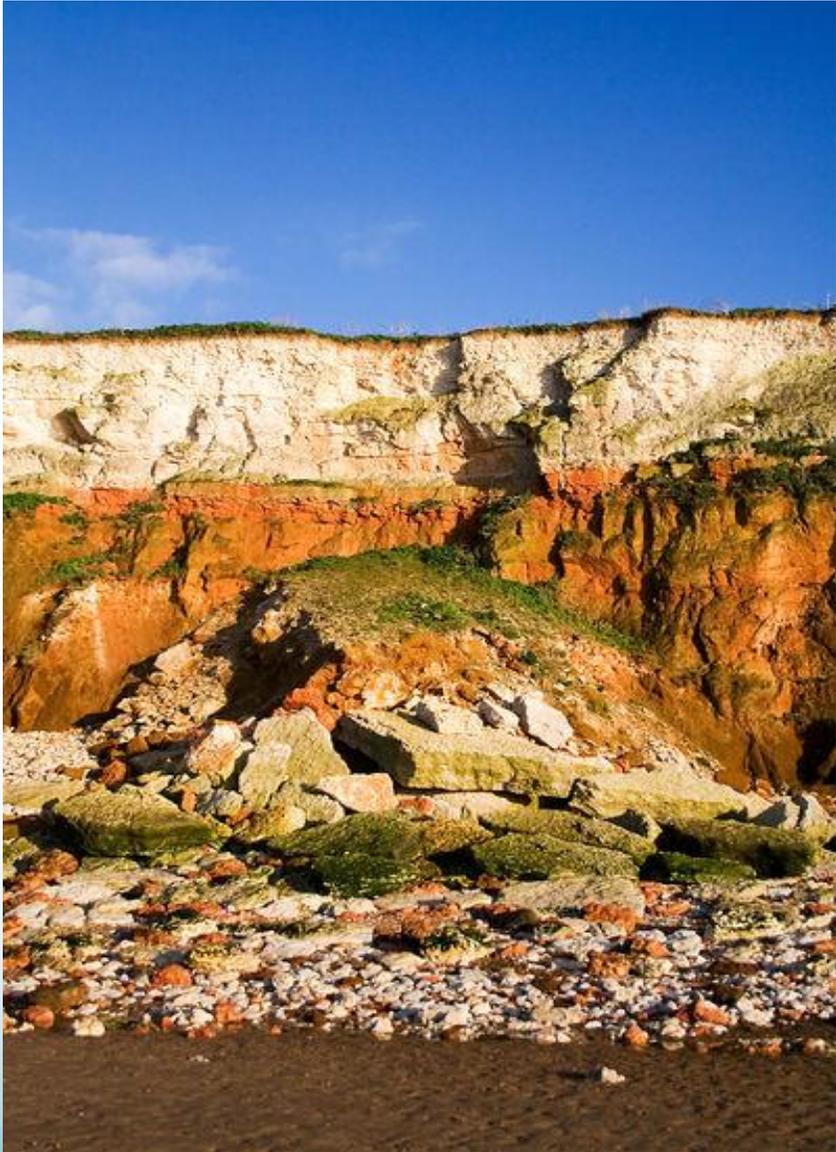
2. When a rock has holes and pits in it, you can assume one of the below has occurred.

- a. erosion
- b. chemical weathering
- c. physical weather
- d. all of the above

Conceptual Understanding

On the next two pages you will see four different pictures. Your task is to identify which represent weathering and which represent erosion. Once you have labeled the picture, use the space provided below to describe what has occurred in the picture to support your choice.





The Bottom Line

All children are scientists. They need to see the connections between science concepts and the world around them. They need to be given opportunities to explore and explain and explore again. Misconceptions can hang on if students don't get a chance to explain their understanding using scientific reasoning.



Assessment in Social Studies

The Good, the Bad, and the Ugly

- ***The Good:*** Students see the human side of social studies and think deeply about the issues involved.
- ***The Bad:*** Student memorize names, places, and dates for a test and quickly forget them.
- ***The Ugly:*** When students say they dislike social studies because all they do is read the textbook and “do” the questions.

Traditional Test

Please answer *true* or *false* for each statement.

1. No women could vote in a general election in the nineteenth century.
2. Only about 60% of all males could vote after 1884.
3. The NUWSS was under the leadership of Emmeline Pankhurst.
4. The motto of the suffragettes was “Votes for Women.”
5. Suffragettes differed from suffragists mainly by virtue of the social class to which the women belonged.
6. “The Cause” was a phrase which referred to the whole movement for women’s rights.

What do you think?

What are some instructional strategies you might use to teach students about women gaining the right to vote?

How might you assess this content in a creative, authentic way?



Conceptual Understanding

FORCED FEEDING

Who : doctor in a prison ward **What :** force feeding a suffragette
Where : women's jail **When :** 1913
Why: woman refuses to eat

Who : suffragette **What:** refuse to eat
Where : women's jail **When** 1913
Why: I was arrested many times in 1913 for protesting
I refuse to eat until women get the right to vote

Who : doctor in a prison ward
What : holding down a suffragette to force feed her.
Where : women's jail **When :** 1913
Why: woman refuses to eat and will starve if she doesn't

Who: warden of a woman's county jail
What : restraining on of my prisoners
Where: women's prison **When:** 1913
Why: It is my job to keep order and follow the directions I have been given
by the courts. In this case it is my job to keep the woman alive.

Who: nurse in the woman's county jail
What : helping the doctors feed one of the prisoners
Where: women's prison **When:** 1913
Why: I have been ordered by the doctors to help force feed one of the
prisoners.



Information reference:

http://www.slate.com/blogs/the_vault/2013/07/17/sylvia_pankhurst_the_suffragette_s_first_person_account_of_force_feeding.html

Traditional Assessments

- 1. The U.S. campaign of aerial bombardment against North Vietnam, begun in March of 1965, was known as Operation ____.**
a. Desert Storm b. Dumbo Drop c. Paperclip d. Rolling Thunder
- 2. What European country controlled Vietnam until World War II?**
a. France b. Germany c. Great Britain d. Spain
- 3. Which of the following was not used by the American military in Vietnam?**
a. aerial attacks b. Agent Orange c. napalm d. nuclear bombs
- 4. Who led the Viet Minh in the early 1900s?**
a. Ho Chi Minh b. Ngo Dinh Diem c. Nguyen Van Thinh d. Nguyen Van Thieu
- 5. According to what Cold War philosophy did the United States believe that, if Vietnam fell to communism, all of southeastern Asia would fall to communism?**
a. attrition b. domino theory c. social contract d. socialism
- 6. Where was the United States Navy allegedly attacked in 1964?**
a. Gulf of Thailand b. Gulf of Tonkin c. Pearl Harbor d. South China Sea
- 7. The Viet Cong and North Vietnamese Army launched the ____ in 1968.**
a. fall of Saigon b. Geneva Accords c. Gulf of Tonkin Resolution d. Tet Offensive
- 8. The Ohio National Guard shot and killed student anti-war protestors on the campus of what college in 1970?**
a. Kent State University b. Miami University c. Ohio State University d. University of Toledo
- 9. The report "United States-Vietnam Relations, 1945-1967: A Study Prepared by the Department of Defense," published by the *New York Times* in 1971, is better known as what?**
a. Helsinki Accords b. National Commission c. Pentagon Papers d. Starr Report
- 10. When did Saigon fall to the North Vietnamese?**
a. 1972 b. 1973 c. 1974 d. 1975

Conceptual Understanding

- Students search for images.
- Critical literacy is embedded in the assignment.
- The process is the instruction.
- Summative assessment not needed????



Traditional Assessments

1) What was manifest destiny?

- A. Something that the U.S came up with meaning that their destiny would be to take over what is now the U.S
- B. Something that rich people came up with meaning that they where going to get richer
- C. Something that rich people came up with meaning that they where going to get richer
- D. Something poor people came up saying that they where going to get rich
- E. Something farmers came up with saying they would be the president

2) What did the U.S originally want from France?

- A. 7.5 million for New Orleans
- B. 15 million for New Orleans
- C. 15 million for Louisiana
- D. million for Louisiana

3) What was the United State's next target after New Orleans?

- A. Texas
- B. Oregon
- C. Florida
- D. The rest of Louisiana

4) Who was Andrew Jackson?

- A. Some random farmer that became a president
- B. A soldier known to be a great frontiersman
- C. The hero of the battle of New Orelans
- D. The hero of the battle of Florida

5) How many troops did he invade Florida with?

- A. 1500 B. 1600 C. 1800 D. 1700

- **Manifest Destiny** is a 19th-century belief that the United States had a mission to expand, spreading its form of democracy and freedom. Advocates of Manifest Destiny believed that expansion was not only good, but that it was obvious ("manifest") and certain ("destiny"). Originally a political catch phrase of the 19th century, "Manifest Destiny" eventually became a standard historical term, often used as a synonym for the territorial expansion of the United States across North America towards the Pacific Ocean.

- The term was first used primarily by Jacksonian Democrats in the 1840s to promote the annexation of much of what is now the Western United States (the Oregon Territory, the Texas Annexation, and the Mexican Cession). It was revived in the 1890s, this time with Republican supporters, as a theoretical justification for U.S. expansion outside of North America. The term fell out of usage by U.S. policy makers early in the 20th century, but some commentators believe that aspects of Manifest Destiny, particularly the belief in an American "mission" to promote and defend democracy throughout the world, continued to have an influence on American political ideology.

Conceptual Understanding

Manifest Destiny

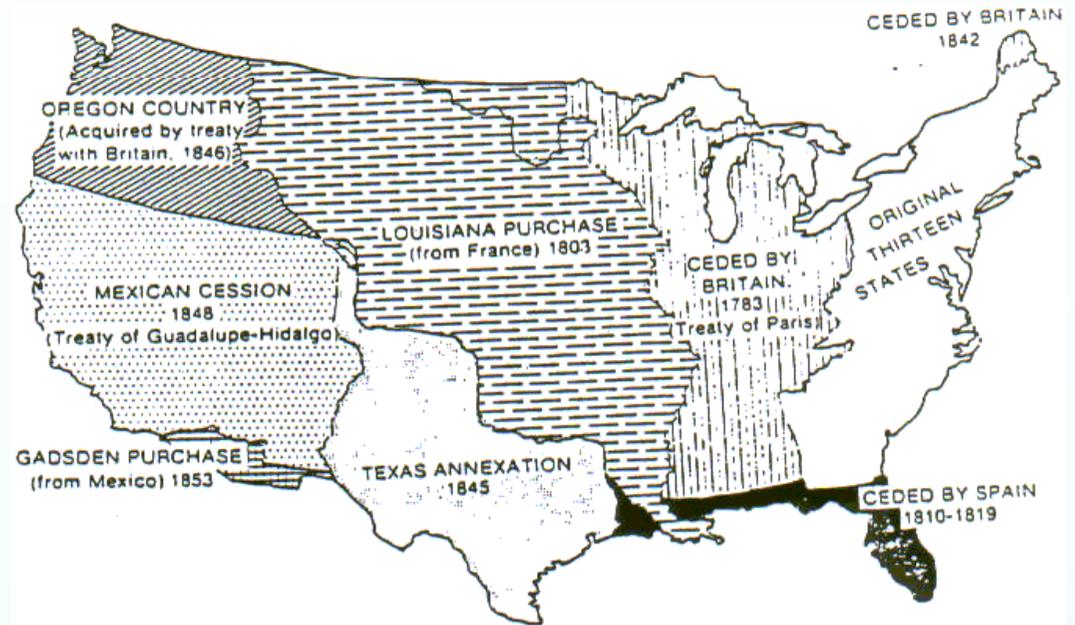
Characters:

Moderator 1
Moderator 2
Northerner
Southerner
Fur Trader (Miner)
Pioneer
Government (Official)
Indian

Time: 1790

The dynamic of this dramatization is movement across and settlement of the geographic area of North America. Characters are representative of groups of people occupying territory; the set is the territory—the map of continental United States. Two alternatives are suggested for establishing the set: 1. Draw a large map on the floor of the stage with chalk or washable paint and have characters positioned appropriately on the floor; or 2. Use the largest possible projection onto a screen of the same map and have characters place their own symbols at the appropriate spots on the transparency. (See accompanying map.)

Costumes are optional but signs worn indicating identity are helpful. The Moderators stand at the far left (far west) at a chalkboard or easel where they can post notices of territorial additions.



The Bottom Line



Students need to see that social studies is HUMAN, it is LIFE, and it is RELEVANT to them. By actively involving them, by using visuals, and by asking them to think and discuss, they become social studies detectives!

Consider:

Traditional	Creative
Demonstration	Cooperative learning
Lecture	Inquiry
Note-taking	Simulation/role play
Research	Project design
Graphic organizer	Conceptual mapping
Technology	Instructional technology
“Read and do” questions	Problem-based learning

An Example: Animals and Habitats

Ways to Teach	Ways to Assess Conceptually
<p>In teams, sort cards of animals into like groups based on needs. Label those groups based on the common element of the group. Follow-up discussion to address various qualities of the different kinds of animals.</p>	<p>Each student receives an organizer with 3 established animal categories and a group of cards to sort.</p>
<p>Watch video clips of animals in natural habitats. Discuss natural environments and encroaching human activity that affects them. Students each take an animal and join together to create a script from the animals' perspectives and how the human activity impacts their food, shelter, water/air needs.</p>	<p>Each student takes an animal from the video and draws a healthy habitat with all needs evidenced. They then draw a second picture on the back that shows human encroachment with either drawn or written evidence of the kinds of problems that occur as the habitat is changed by humans.</p>
<p>Assign a group a household appliance. Design a creature that could live there based on food, shelter, water/air needs. Draw animal and label behaviors that help it to survive.</p>	<p>Give each student a location in a natural environment with some specific climate, predator, and habitat elements. Create an animal that can survive there.</p>

The Key

Create a foundation linking your instruction and assessment. They are not always separate.

Traditionally, instruction happens first, followed by assessment at the end.

When you use creative ways to teach and assess, they tend to be intertwined and not easily separated, creating a cycle of learning that embeds critical thinking.

Now it's up to you!

1. Choose a content area you wish to discuss.
2. Find 3 others who teach in that content area or are willing to discuss it.
3. Create a T chart.
 - a. choose a specific concept or unit topic
 - b. on the left: a bulleted list of ways you might teach that topic conceptually
 - c. on the right: authentic assessment ideas; “test the way you teach”
4. Share with the group.
5. Highlight experiences on your chart that involve creativity, critical thinking, and collaboration.

(Try to avoid multiple choice, true/false, and other traditional selected response formats)

Remember Mr. Klavetter?

- **Nominated for an award of excellence** by his principal based on achievement gains on a state standardized test in mathematics
- “I can pick the students who were with you. **They try, they persist, and they don't respond with 'I don't get it'.**”
- Moved more deeply into relationship-based, inquiry-supported teaching and learning - the tone in the classroom has changed. **“I need them as much as they need me . . . and that motivates them.”**

Remember Mrs. Walker?

- Note that the rough draft evaluation was designed for students to **treat practice as a valuable component in the creative process** and make the learner think about their performance and how to build upon it. I have found that having students do this several times during a term has improved outcomes as well as assist them with independent thinking.
- On many assignments **students are asked to assess their final work in a written self-assessment.** I have learned to grade artwork after reading their responses and grasping the thought process and challenges students faced while creating the work.
- When a student asks what is wrong with their work I have learned to ask what they mean by wrong and have them explain their dissatisfaction. **Most of my assessments are in the form of immediate feedback in the form of questions** that lead them to answers and or to each other.

Remember Mr. Berzinski?

- Critical thinking – **Regular expectation** of analysis, synthesis, and evaluation requires them to know, comprehend, and apply)
- **Helps students find valid and reliable information**, know which sources are worthy of trust, - they do a learning experience where they track an issue across various media sources (discuss source bias)
- **Less about how much you know; more about, now that you have access to information, what are you able to do with it?** What does this mean?
- Advice: Don't be afraid to go out onto a limb - **we so easily revert to the way we were taught . . .** which may not work for our current learners . . .

**If you always do what
you always did,
you will always get
what you always got.**

Ask Me.....

***“How will I ever
use what I’m
learning
today?”***

Do not confine your children to your own learning, for they were born in another time.

Hebrew proverb

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Center for Leadership in Education

All Students



Questions?
Comments?
Suggestions?

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