

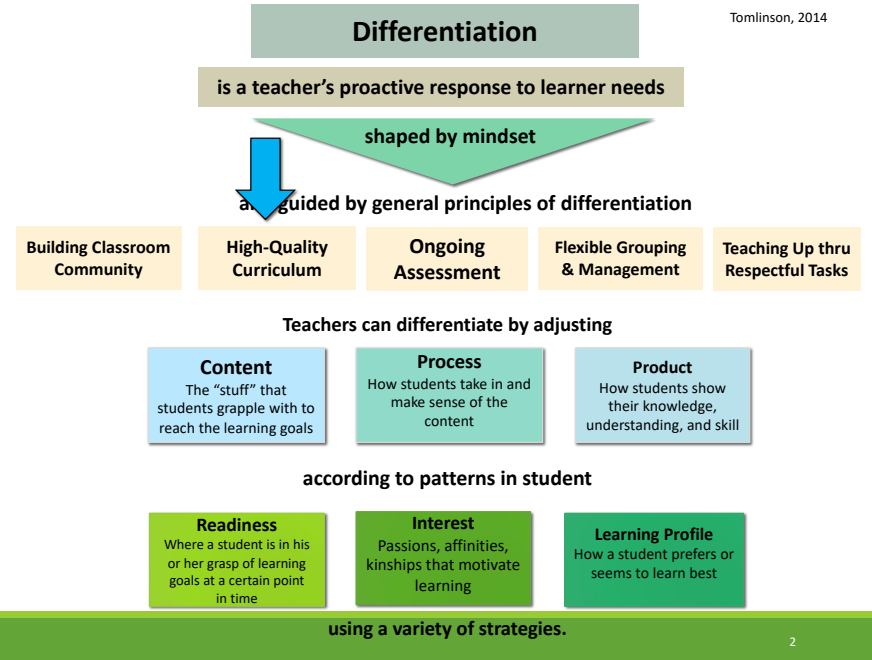
UNIT DESIGN 101



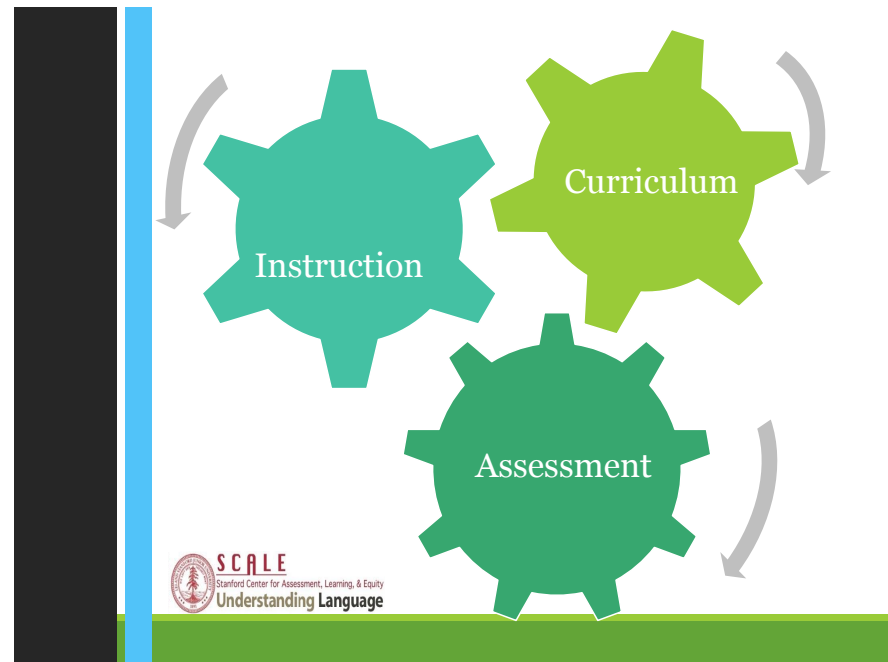
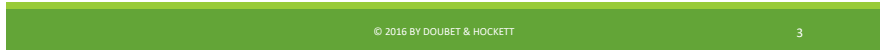
Emma Lazarus High School
 Kristina Doubet, PhD –
 James Madison University
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Tomlinson, 2014



Planning Backwards = Differentiation's Curricular Foundation



Going to the Root...

- Education – Latin Origin:
 - *educere: to bring out*
 - *educere: to draw out*



In other words...

TO “DRAW OUT” ...

... NOT TO “POUR IN”



Planning a Focused Curriculum Means Clarity About...

- **UNDERSTANDINGS**
 - Principles/
generalizations
 - **Big ideas of the discipline**

- **KNOWLEDGE**
 - Facts
 - **Vocabulary**
 - Definitions

- **SKILLS**
 - **Higher order**
 - **Skills of Disc.**

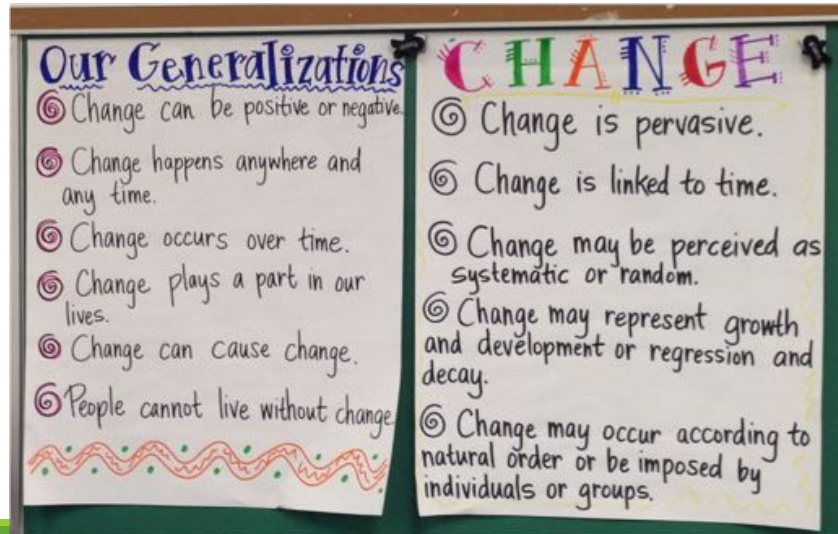
Which of the three is most emphasized? Least?

Students will Understand THAT...

- Systems are made of interdependent parts; change to one part affects all the other parts.
- Conflict can be both constructive and destructive.
- Language gives us power.
- Formulas allow us to use known information to discover unknown information.
- Rhythm organizes the time and energy of sound and silence.
- The optimal defense depends on the opponent's decision about offense (and vice versa)

Do these have transfer power? Do they invite investigation and debate?

Students add to TEACHER'S



Kemps Landing – Virginia Beach, VA

Understandings Serve as...



Acquisition Goals

STUDENTS WILL KNOW...

Facts, names, dates, places, information; also includes procedural knowledge

Examples:

- Thomas Jefferson – important biographical data
- 1492 – the year Columbus is reported to have discovered the Americas
- "The Continental Divide" – a divide separating river systems that flow to opposite sides of a continent
- The multiplication tables
- The steps of the scientific method

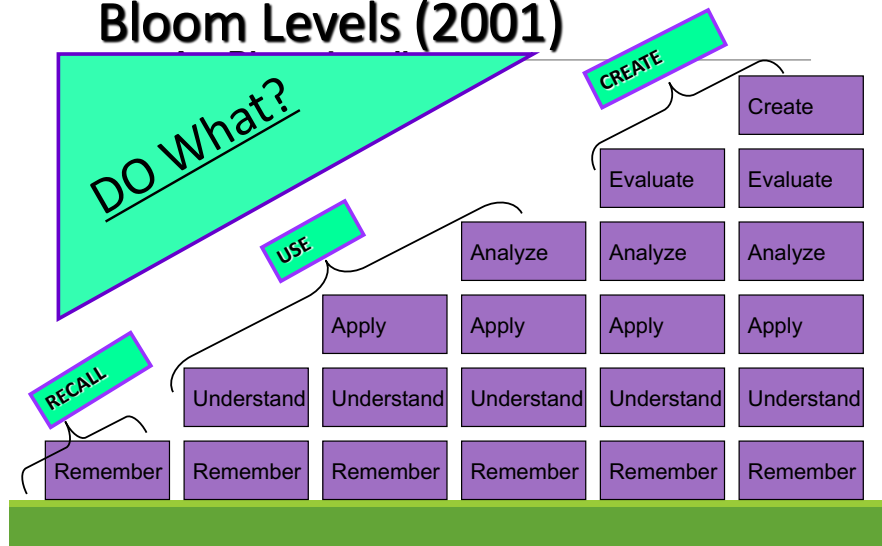
STUDENTS WILL BE ABLE TO...

Skills (basic skills, skills of the discipline, skills of independence, social skills, skills of production)

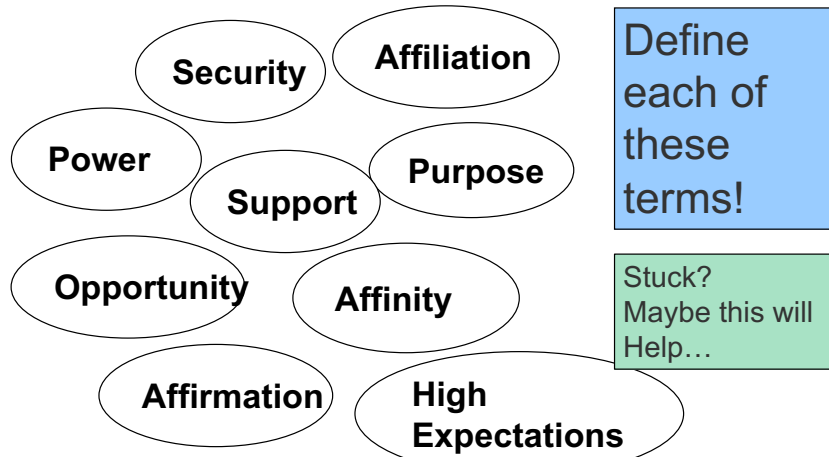
Examples:

- Analyze text for meaning
- Solve to find perimeter
- Solve 2-digit multiplication problems
- Compare and contrast approaches to problem solving
- Evaluate work according to specified criteria
- Use graphics to represent data appropriately

Bloom Levels (2001)

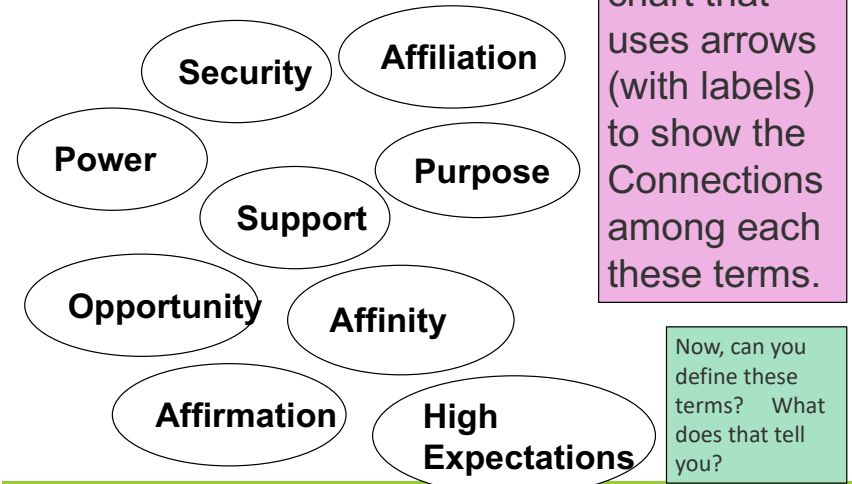


Quickly!!!!



Tomlinson & Doubet: SMART in the Middle_(Chapter 2)

On Poster Paper...



Tomlinson & Doubet: SMART in the Middle_(Chapter 2)

In Your "Design" Groups

Examine the Protocol/Unit



- ✓ Examine the protocol, "UBD Design Standards 2.0"
 - ✓ What looks familiar? What looks new? Consult p47
 - ✓ Examine the "SAMPLE UNIT" on the website to get a feel for it's scope and sequence
 - ✓ Use the protocol or checklist to examine the SAMPLE UNIT. Make sure you can point to evidence from the unit to support your assertions.
 - ✓ Pay particular attention to the portion of the unit that corresponds to your "Design" area of focus.
- ✓ Be prepared to share those ideas with the full group.*

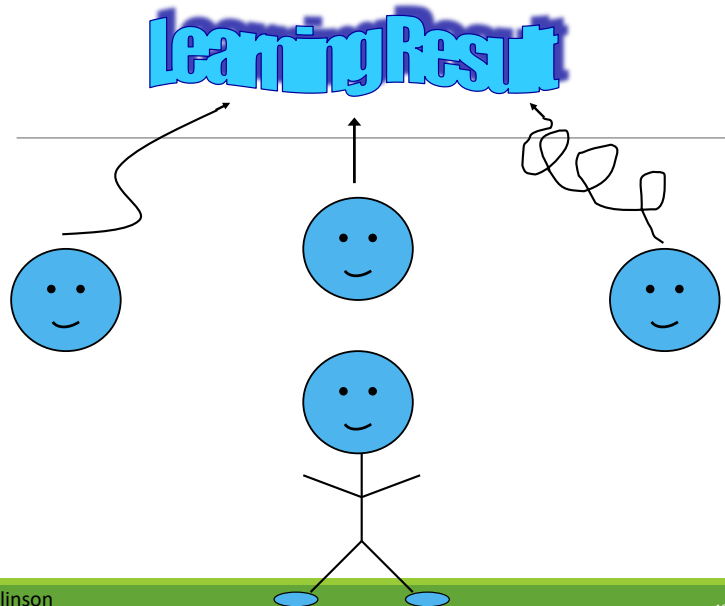
Unit Plan				
Stage 1	3	2	1	Feedback and Guidance
1. Specifies the desired long-term transfer goals that involve genuine accomplishment.				
2. Identifies important, transferable ideas worth exploring and understanding.				
3. Identifies understandings stated as full-sentence generalizations: <i>Students will understand that...</i>				
4. Is framed by a few open-ended, thought-provoking, and focusing essential questions.				
5. Identifies relevant standards, mission, or program goals, to be addressed in all three stages.				
6. Identifies knowledge and skill needed to achieve understanding and address the established goals.				
7. Aligns all the elements so that Stage 1 is focused and coherent.				

Now Move into Content Groups

- Use the same protocol to evaluate the unit that most closely matches your content area (
 - Team 1 - 3 Social Studies Teachers
 - Team 2 - Physical Education and Science
 - Team 3 – Math (Science/Math person you are in this group)
 - Teams 4-6 – ESL/ELA (3 in each team)
- As you evaluate your unit with the other members of your content area group, make notes about anything you see in this content unit that sheds light on the “Problem of Practice” your other group is grappling with
- Move back to your “Problems of Practice” groups and debrief. What did you learn?
- Now turn your attention to your own unit. What ideas do you have for upgrading your own design quality?

Before you Leave

- Reflect on how your understanding has evolved during today’s session.
- On the handout, make specific notes about where you are in regard to Stage 1.
- This will be your “exit ticket” for today.



UPGRADING UNIT DESIGN ALA UBD PART 2



Emma Lazarus High School
11/8/2017
Kristina Doubet, PhD –
James Madison University
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Concepts, Understandings & EQs



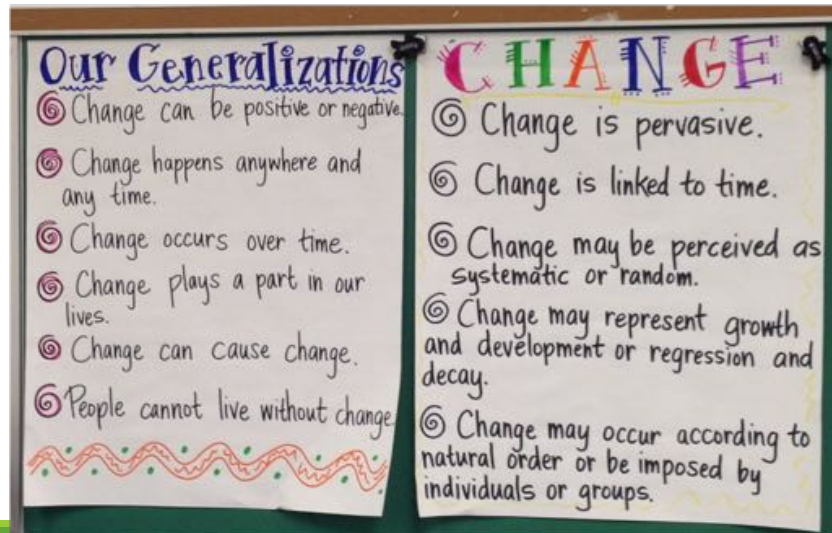
PROGRESS	PERSPECTIVE	CONNECTIONS	STRUCTURE & FUNCTION
PATTERNS	RELATIONSHIPS	EFFICIENCY	SYSTEM
SURVIVAL	COMMUNITY	CYCLES	CONFLICT
INTERDEPENDENCE	PERSUASION	NEEDS & WANTS	CHANGE
VOICE	POWER	BALANCE	IDENTITY

Students will Understand THAT...

- Systems are made of interdependent parts; change to one part affects all the other parts.
- Conflict can be both constructive and destructive.
- Language gives us power.
- Formulas allow us to use known information to discover unknown information.
- Rhythm organizes the time and energy of sound and silence.
- The optimal defense depends on the opponent's decision about offense (and vice versa)

Do these have transfer power? Do they invite investigation and debate?

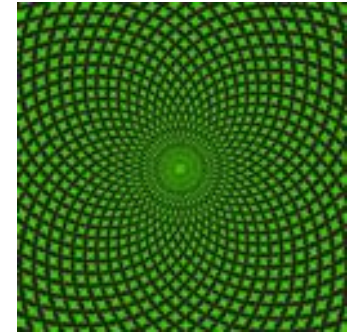
Students add to TEACHER'S



Kemps Landing – Virginia Beach, VA

Addressing Patterns

- How many Us/Eqs do I need? How many is too many? Can I address more than one at once
- Balance between topical and overarching Us/EQs



Content-Specific Questions

- Go to the Padlet linked on my website.
- EVERYONE complete Task 1. This asks you to visit a website and examine full UBD units from the Massachusetts DOE. Examine units close to your grade level SPECIFICALLY to find 1) answers to the the questions posed on the previous slide and 2) answers to your individual questions.
- If you finish early, move to Task 2 (review) or Task 3 (creating your own) – whatever you feel most ready to tackle.



High Expectations...

Students will UNDERSTAND THAT...

- Metaphors and similes allow us to communicate meaning in ways that normal language cannot.
- Metaphors and similes communicate ideas by making sensory connections.

Students will KNOW...

- Definitions of metaphor, simile, figurative language, imagery, stanza, couplet, free verse

Students will BE ABLE TO...

- Use metaphors and similes to convey descriptions
- Write in a given stanza format

EXIT CARD (previous class)

Name: _____ Period: _____

1. What is a “metaphor”?
2. Give at least two examples.
3. Explain why song-writers and poets use metaphors.

Warm-up Journal Prompt:

Describe yourself in such a way that someone who had never met you would feel as though they know you well.

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“ME” Metaphor Poem

- A**
1. Comb your journal entry and circle the descriptions of yourself that you believe are the most important.
 2. Choose something to compare yourself to that captures all of these aspects of your personality. It can be something abstract, something in nature, a machine of sorts, a song, a force, a color—the only thing it CAN'T be is another person.
 3. Write a poem comparing yourself to what you chose in step 2 – without using “like or “as”. Strive for at least 4 stanzas (line lengths in stanzas can vary). Let us see the real you.

“ME” Metaphor Poem

- B**
1. Comb your journal entry and circle the descriptions of yourself that you believe are the most important.
 2. Now think of things that are like each of those aspects of your personality. These things can be abstract, from nature, electronics, colors, etc. —the only thing they CAN'T be are people.
 3. Write a poem made up of couplets – one couplet comparing yourself to each thing you chose in step 2 – without using “like or “as”. Strive for at least 6 comparisons. Let us see the real you.

I am a powder keg
My anger builds until someone
makes it explode.
I am an eraser -
Eliminating all the bad thoughts
from my mind.
I am a puppy -
Loyal and friendly to those I love
I am an ant -
Everyone looks down on me.
I am nothing -
No one can see me.
But I am something -
Brilliant and intelligent.
Who am I?
Powder keg, eraser, puppy, ant,
nothing, and something.
I am
Me.

~April~
7th Grade

I am Love -
I am cherished.
I am looked for often,
But seldom found...
I am Love -
sometimes sweet,
But always with the potential
To bite you in the back...
I am Love -
Oh-so-precious,
But you'd better believe you can see
The ugly side of me...
I am Love -
A big heart full of joy,
A calm, quiet day with
a big storm brewing,
A bird soaring higher and higher
Into that dangerous sky.

~Jasmine~
7th Grade

Can you
discern the
learning
goals?

Equally Respectful?

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From Standards to UKDs – An Example

Reading, RL.4.6: Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.

Students will Understand THAT...*What a culture values is revealed through its literature; some values are universal while others are determined by culture.*

Students will Know... Definitions of/difference between “theme” and “topic”, characteristics of a “quest”, distinguishing characteristics of “myth”

Students will be able to... **Compare and contrast** literature from different cultures in terms of subject matter and theme; **Analyze** cross-cultural literature for common values emerging from what’s “taught” and what’s “celebrated”; **formulate** an argument for the source of similarities and differences of values among cultures

Translating Standards into Learning Goals

HS English: CCSS ELA RL 9-10.2 Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details and **9-10.3:** Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text

If students have mastered these standards...

1. What question(s) should they be able to answer?
2. What “answers” might they have to those questions?
3. What else would they understand (about character, about plot and theme)?
They would understand that...
4. What terms would they be able to define? (Give grade-level appropriate definitions, if possible.) What other knowledge would they have?
5. What other skills (besides the one listed in the standard) would they have or need?

Translating Standards into Learning Goals

HS English Informative/Explanatory Writing: CCSS W.9-10.2B: Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience’s knowledge of the topic

If students have mastered this standard...

1. What question(s) should they be able to answer?
2. What “answers” might they have to those questions?
3. What else would they understand (about character, about plot and theme)?
They would understand that...
4. What terms would they be able to define? (Give grade-level appropriate definitions, if possible.) What other knowledge would they have?
5. What other skills (besides the one listed in the standard) would they have or need?

[The Alchemist], a study in Perspective and Motive

<p>Essential Questions</p> <ul style="list-style-type: none"> •How and why does a character’s perspective change? •What drives a character’s actions and decisions? 	<p>Understanding Goals:</p> <ul style="list-style-type: none"> •A character’s perspective changes over the course of a story in response to conflict (with self, with other characters). •A character’s actions and decisions are driven by his/her goals and motives. •A character’s motives are often complex and multi-faceted.
<p>Knowledge Goals</p> <ul style="list-style-type: none"> •Concepts/Terms: <i>perspective, motive, dynamic/static characters, metaphor, foreshadowing, symbolism, conflict, theme</i> •Characters, setting, plot/events, themes of <i>The Alchemist</i> 	<p>Skill Goal (aligned with CCSS ELA RL 9-10 2B;3 & W.9-10.2B)</p> <ul style="list-style-type: none"> •Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text •Determine a theme or central idea of a text and analyze in detail its development over the course of the text. •Examine the effect of different perspectives (of events and people) on story line •Use textual evidence to support an opinion •Use details, quotations, and illustrations to characterize author’s craft

Translating Standards into Learning Goals

Pre-Algebra FT 4 - 6.SP.A.3: Recognize that a measure of center for a numerical data set summarizes all of its values with a single number...

If students have mastered this standard...

1. What question(s) should they be able to answer?
2. What “answers” might they have to those questions?
3. What else would they understand (about character, about plot and theme)?
They would understand that...
4. What terms would they be able to define? (Give grade-level appropriate definitions, if possible.) What other knowledge would they have?
5. What other skills (besides the one listed in the standard) would they have or need?

Mean, Median, and Mode, a study in Central Tendency

Essential Questions

- “Where” is the middle of a data set? How do mathematicians find it? Describe it?
- What is the “best” measure of central tendency?

Aligned with Pre-Algebra FT 4 – 6.SP.A.3

Understanding Goals:

- All numerical data sets have a “middle” (**central tendency**) that can be discovered and described in more than one way.
- Each measure of the “middle-ness” (**central tendency**) reveals something different about the set.
- The “best” measure of **central tendency** depends on the kind of data being used and the purpose for which it’s being used.

Knowledge Goals

- Definitions and examples of key concepts: *central tendency, average, mean, median, mode, skew*

Skill Goals

- Calculating mean, median, and mode.
- Analyzing and applying the differences between mean, median, and mode.
- Determining when and how to use mean, median, and mode.

Math

- Exit Card: Students were given 3 word problems and asked to set up and solve each
- Pattern: Students either “Got it” (set up and solved all 3 correctly) or “Made Errors” (in either set up or in solving; not all the same errors)
- Task 1: You solved all of these equations correctly. Now make up three equations for others to solve: one that’s harder than those you just solved, one that’s at about the same level, and one that’s easier.
- Task 2: [This #] of the equations that you solved are incorrect. Find the incorrect solutions and fix them.

*Adapted from Wiliam (2011). *Embedded Formative Assessment*

Tiered English Tasks

FOR EVERYONE:

REVIEW OF THE RELATIONSHIP BETWEEN ARGUMENT AND PERSUASION

For those who were able to distinguish between ethos, pathos, and logos in a text:

Watch a video and examine it for ethos, pathos, and logos. How do those elements reveal and contribute to author’s purpose?

For those who were NOT able to distinguish between ethos, pathos, and logos in a text:

Examine print ads for their use of ethos, pathos, and logos. What impact do those elements have on the “reader”?

Interest Inquiry Groups

Interest Groups

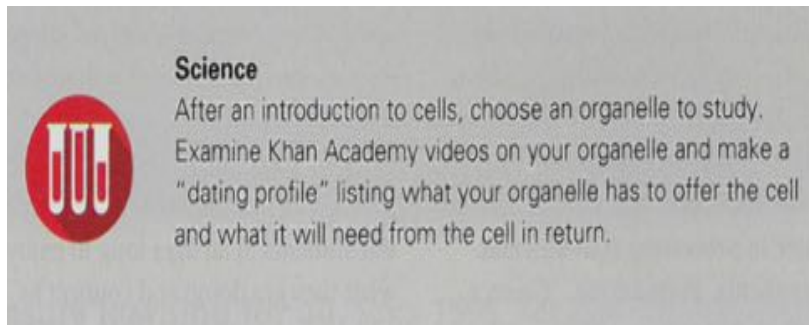
- Students choose from the following ad options:
 - Sports Drinks
 - Hair Products
 - Game Systems
 - Phones
- In pairs or groups of 3 with others who chose same option, students analyze the ads for techniques used, strengths and weaknesses, and recommendations for improvement.

Interest Inquiry Groups – Soc St.

- Students choose from the following “systems”:
 - **Writing a Song**
 - **Strength Training**
 - **Planning/taking a trip**
 - **Playing a Video Game**
- In pairs or groups of 3 with others who chose same option, students discuss how steps of this system resemble the steps of creating legislation.

Interests:
Music (writing/producing)
Working Out
Traveling
Video/Board Games

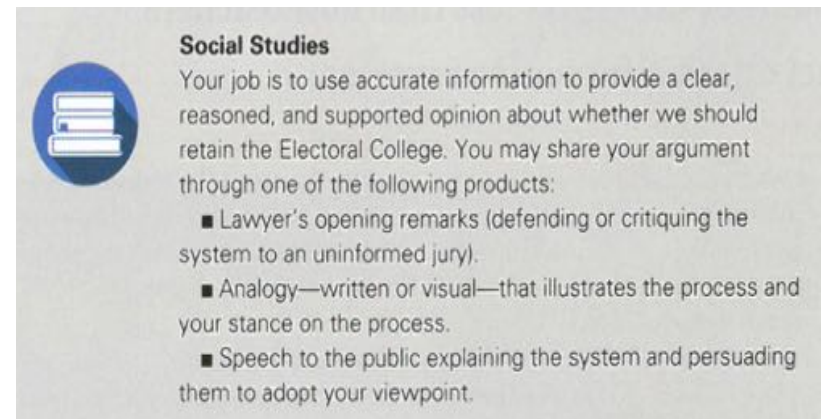
Science



Science
After an introduction to cells, choose an organelle to study. Examine Khan Academy videos on your organelle and make a “dating profile” listing what your organelle has to offer the cell and what it will need from the cell in return.

The graphic features a red circular icon with three white test tubes on the left. The text is in a clean, sans-serif font.

Social Studies



Social Studies
Your job is to use accurate information to provide a clear, reasoned, and supported opinion about whether we should retain the Electoral College. You may share your argument through one of the following products:

- Lawyer’s opening remarks (defending or critiquing the system to an uninformed jury).
- Analogy—written or visual—that illustrates the process and your stance on the process.
- Speech to the public explaining the system and persuading them to adopt your viewpoint.

The graphic features a blue circular icon with three white books on the left. The text is in a clean, sans-serif font.

Transfer of Learning is:



What one does to express deep levels of understanding across a variety of settings. For example...

- ...can students apply a problem solving strategy to a unique situation?
- ...can students write for an intended audience, regardless of the audience?
- ...can students design experiments to test a variety of hypotheses?
- ...can students evaluate the credibility of a secondary source across different time periods?







We can't transfer if we are only "familiar" with content.



Choose your Task

[HTTPS://PADLET.COM/DOUBETKJ/UBD](https://padlet.com/doubetkj/ubd)

Entry Points: Powerful Words

<p>Storytelling Tell a story – real or fictional - about a time when words had the power to change a situation, someone's mind, etc. Include details about the circumstances and how the change resulted.</p> 	<p>Giving Reasons Construct a simple but powerful argument that supports or refutes this claim: <i>"Words have the power to change minds, attitudes, and behaviors."</i></p> 	<p>Thinking Big What is a "word"? What makes a word <i>more</i> powerful? <i>Less</i> powerful? Can words ever be <i>too</i> powerful?</p> 
<p>Activating Senses Think about two kinds of debates: One in which the participants use respectful language to make their points in which they use disrespectful language. Generate speech bubble "sounds bites" from each one.</p> 	<p>Collaborative Work together to write and act out a situation that shows the difference between using words powerfully and using them ineffectively.</p> 	<p>Using Experience Drawing on your own experiences, generate a short list of tips called "How to use words powerfully to bring about change."</p> 

DOUBET AND HOCKETT

Ensuring Authenticity



What do you Think?

- ✓ Evaluate this task. What did teachers do with their students to get them ready to be successful on this?
- ✓ Imagine what how the task's creator's achieved this? Where did they start?



<https://www.youtube.com/watch?v=KZomm-1BbYQ>

Kristina Doubet

Brainstorm

What are some authentic (real world) roles related to your content area(s) that experts might assume?



Kristina Doubet

What Would an Expert Do? *Some Possible Roles*

Math: Mathematician, Architect, CSM, Engineer, Statistician, Accountant, Actuary, Financial Advisor, Astronaut, stockbroker, programmer, air-traffic controller, A.E.D., cook, mechanic, building contractor

Science: Biologist, Botanist, Chemist, Environmental, genetic counselor, zoo keeper, doctor, paleontologist, forensic scientist, construction site manager, mechanic, engineer

Social Studies: Archaeologist, Anthropologist, Historian, Museum Curator, Film Consultant, politician, lawyer, psychologist, geographer, cartographer, international relations consultant/diplomat, tour guide, fact-checker, author, economist

English: Author, Editor, Publisher, lawyer, advertising, politician, book critic, movie critic, technical writer, public relations, journalist

Spanish: English fields + Tour Guide, Interpreter, Ambassador

P.E.: Coach, Referee, Commentator, Columnist

Exploratory: Graphic Designer, Musician, Music/Art Critic, Admin. Asst., Engineer

Kristina Doubet

Designing Performance Task Scenarios

- G** ♦ *What is the **g**oal in the scenario?*
- R** ♦ *What is your **r**ole?*
- A** ♦ *Who is the **a**udience?*
- S** ♦ *What is your **S**ituation (context)?*
- P** ♦ *What **p**roducts/**p**erformances will you prepare?*
- S** ♦ *By what **S**tandards (criteria) will your work be judged?*



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Kristina Doubet

MS Science Example

- The goal is to determine the best solution for evaluating water quality and usability for recreational purposes in your city.
- **Role:** You are the director of the water authority
- **Audience** are members of the city council who must make final decisions on usability based on your recommendations.
- **Situation:** You must plan and assess the water quality from at least 5 different fresh water locations in your city, conduct experiments, and write a report for non-scientists on your findings and recommendations.
- **Products or Performances:** Identified experiments, tests, and results from 5 water samples. Written or oral report with visuals and recommendations to explain the conditions and analysis of each water site.

HS ELA Example

Goal – Use pathos, ethos, and logos, including “textual” support or evidence, to convince an audience

Role – You are a Movie Critic

Audience – Readers of your Weekly Column

Situation – A new movie [or an old favorite] will be playing nationwide this weekend. Your job is to convince audiences to see it (or NOT to see it if you think it has been overrated). In order to appeal to every reader, you will employ pathos, ethos, and logos in your review, along with appropriate evidence from the film (that which will paint a clear picture without “giving away” the movie’s end).

Product – Online blog post containing your movie review and encouraging your followers whether or not they should see it

Doubet

Time to Process

- ✓ Develop your own performance assessment (GRASPs). Be sure to start with your learning goals in mind!

OR

- ✓ Review the Complex Performance tasks (GRASPs) on the slides that follow in the **ppt**, in the **VSUP Task Bank**, and/or at the following site:

<http://jaymctighe.com/resources/websites/>

- ✓ Identify any tasks you could use as-is or tweak a bit to meet the learning goals you identified earlier in the session

Use your GRASPS
Template



Ensuring Accessibility



Math Example

The Smith family wants to re-landscape their backyard. They have come to you, a landscape designer, to find out what you will charge for such an undertaking. They have some specific guidelines for what they want the backyard to contain:

- At least 1 rectangular garden
- At least 1 triangular garden
- At least 1 trapezoidal garden
- At least one parallelogram shaped garden
- A cylindrical pond
- A rectangular prism shaped shed

Additionally, they ask that you:

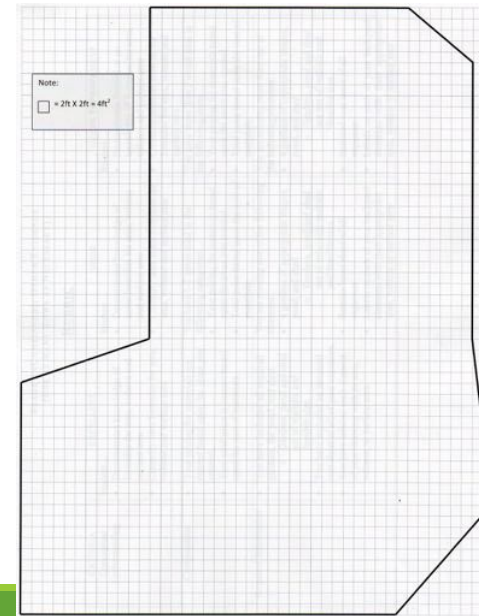
- Mulch all gardens
- Fence in all gardens
- Line and fill the pond
- Paint the shed



The local hardware store has all the supplies you'll need to finish the job! Their prices are as follows:

- Mulch: \$3.50 per 2ft²
- Fencing: \$2.00 per ft
- Pond Liner: \$103.00 per 2ft²
- Outdoor Paint: \$9.50 per gallon (A gallon will cover about 100ft²)
- Note: Water, of course, is free but you will need to inform the Smith's of the volume of the pond you build so that they may buy the correct sized pump.

Alyssa Ault, JMU, 2011



Alyssa Ault, JMU, 2011

How can we Differentiate this Performance Assessment?

- Interest/Culture – Don't make everyone plan a backyard; create and give some options of what to plan but maintain same requirements for shapes, etc.
- Readiness
 - Change scale or shape of map
 - Additional requirements for proportion (challenge)
 - Additional guidance for size (support)
 - Asks students to propose the most economic or sustainable option (challenge)
 - Scaffold the process – Give some students a process log to plan and record progress; give others a process log that guides their process (while calling for *all* students to reflect/revise);