



@KJDoubet

# Differentiation in Middle and High School – Part 1

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*Developed with Jessica Hockett, Ph.D.*

## Today's Approach

- Teachers are more likely to **mimic** that which has been explicitly **modeled**.
- **Examples** and **experiences** equip teachers to transfer ideas and strategies to their own classrooms.



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SO....



...what IS Differentiation, really???

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## Differentiation IS...

Making sure all students get what they need to succeed and grow... even if that means different students get different work

Tailoring instruction to meet the varying learning needs of a diverse student body.

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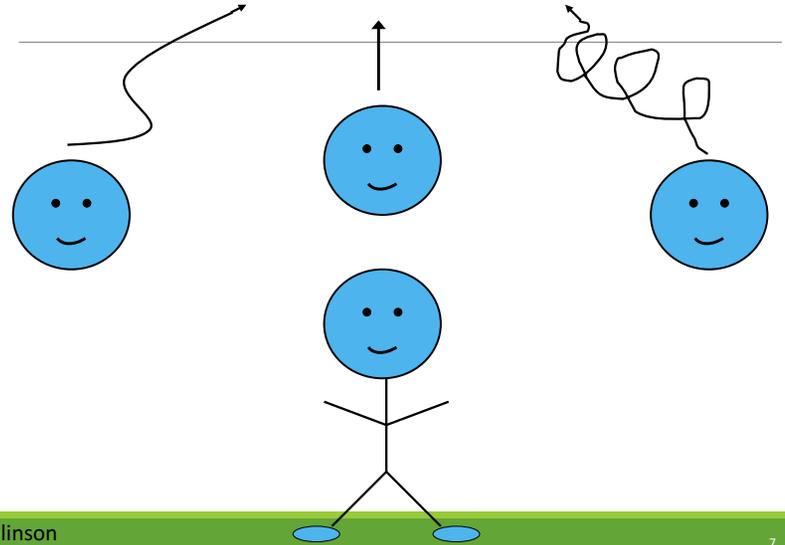
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**Good Differentiation is *NOT*...**

...just "different."



**Learning Result**



**Differentiation is *NOT*...**

A once-in-a-blue moon "event"



**Differentiation is *NOT*...**

An everyday necessity



# 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*

## **Good Differentiation is NOT...**

...just “more” vs. just “less”.

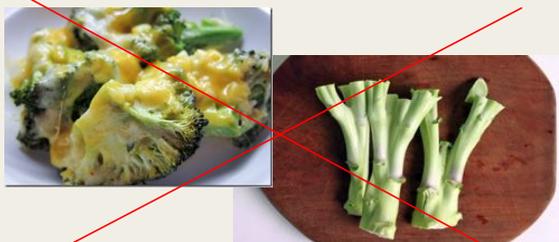


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## **Good Differentiation is NOT...**

Appetizing vs. Unappetizing



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## **Good Differentiation is NOT...**

...relegating students to static ability groups



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# 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

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## 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

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.

A

### “ME” Metaphor Poem

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.

B

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~  
7<sup>th</sup> 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~  
7<sup>th</sup> Grade



## Equally Respectful?

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# DIFFERENTIATION *IS NOT*

|   |   |   |
|---|---|---|
| TRACKING OR GROUPING STUDENTS INTO CLASSES BY "ABILITY"                           | <b>INCOMPATIBLE</b><br><i>with</i> <b>STANDARDS</b> |   |
| <b>BLUEBIRDS, BUZZARDS &amp; WOMBATS</b><br>(ability grouping within a classroom) | <b>DUMBBING DOWN</b><br>teaching for some students  | Something <i>extra</i><br>on top of good teaching                                 |
| Mostly for students identified as <b>GIFTED</b>                                   | A SET OF INSTRUCTIONAL STRATEGIES                   | MOSTLY FOR STUDENTS WITH IDENTIFIED LEARNING CHALLENGES                           |
| <b>INDIVIDUALIZED INSTRUCTION</b>   | <b>IEPs FOR ALL</b>                                 |   |
| <b>ASCD</b>   | <b>A SYNONYM FOR</b><br><i>GROUP WORK</i>           |  |

# DIFFERENTIATION *IS*

|  |  |  |
|--|--|--|
| AN IDEA AS <b>OLD</b><br>AS EFFECTIVE TEACHING                             | Lessons designed around <b>PATTERNS OF STUDENT NEED</b>                          | USE OF WHOLE-GROUP, SMALL-GROUP & INDIVIDUAL TASKS <b>BASED ON CONTENT AND STUDENT NEEDS</b> |
| <b>VALUING and PLANNING for DIVERSITY</b> IN <b>HETEROGENEOUS SETTINGS</b> | Necessary for success with standards for a <i>broad range of learners</i>        | PURPOSEFUL USE OF <b>FLEXIBLE GROUPING</b>   |
| A <b>STUDENT-FOCUSED</b> WAY OF THINKING ABOUT TEACHING AND LEARNING       | <b>TEACHING UP</b>   | <b>AT THE CORE OF QUALITY TEACHING</b>   |
| <b>ASCD</b>  | Designed to <b>ADDRESS LEARNING &amp; AFFECTIVE NEEDS</b> that all students have | 19   |

## Talk with an Elbow Partner

- What was affirmed for you?
- What surprised you?
- What challenged you?



## Workshop Driving Questions

**What is differentiation? What are its foundational principles?**

How can we discover student needs – both as a group and as individuals?

How can teachers differentiate for student readiness, interest, and learning profile?

How can teachers manage differentiation and make it “work”?

## You Choose

1. Pick a column
2. Think and write silently
3. Be ready to share when time is called

Write a “Wikipedia” style definition of differentiation that you feel clarifies its key intent, elements, and principles— in other words, a definition that could clarify thinking in your school/classroom. Use the “see also” option, if you’d like.

- Explain to a teacher new to the field what differentiation is in terms of what s/he would be doing in the classroom – and why. The explanation should help the teacher develop an clear picture of what differentiation looks like in action. You can write them a note, if you want.

- Develop a metaphor, analogy, or visual symbol – even a logo – that you think represents and clarifies what’s important to understand about differentiation’s key intent, elements, and principles.

Adapted From Carol Tomlinson, 2006

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## Next Steps

1. Move to the area of the room assigned to your number/choice.
2. In that area of the room, find a partner. Share and compare your work. Then find another partner and share again.
3. Make sure you discuss similarities and areas of overlap.



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## Directions

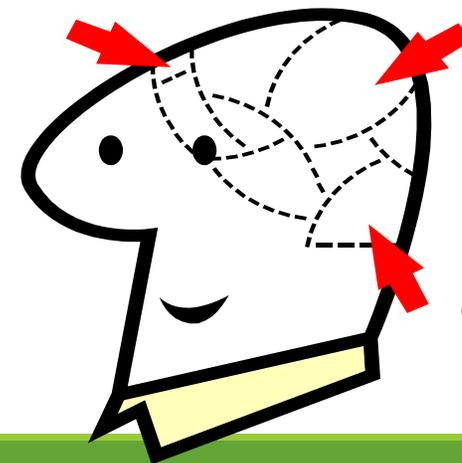
4. When instructed, move into a mixed pair or trio.
5. In turn, share what your task was and how you responded. Note areas over overlap and areas of distinction. Pay particular attention to the content of your answers rather than how you communicated that content.
6. Return to your home tables and identify common points of agreement about what differentiation is and is not.
7. Now, compare your thinking with the graphic

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## Triarchic Teaching - Sternberg

Analytical  
Intelligence



Practical  
Intelligence

Creative  
Intelligence

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## TriMind History Prompts

### Standard:

CCSS ELA-Literacy.RH.9–10.6

Compare the point of view of two or more authors for how they treat the same or similar topics, including which details they include and emphasize in their respective accounts.

| Option 1   | Option 2  | Option 3  |
|--|---|---|
| <p>Read the two accounts of _____</p> <p>Present a point-by-point analysis of the details and ideas that differ between the two accounts. Then, write an analysis that explains (1) why you believe two differing accounts exist and (2) how credible you believe each of authors' perspectives to be and why.</p> | <p>Read the two accounts of _____</p> <p>Recommend to a friend the version of the account that <i>you</i> believe to be most accurate. Support your recommendation with explanations of (1) the differences between the two accounts and (2) the reason behind those differences (e.g., why one perspective is more believable than the other).</p> | <p>Read the two accounts of _____</p> <p>Take on the voice of one of the authors and write a critique or "rebuttal" of the other account. Be sure to discuss (1) the points where your accounts differ, (2) why you believe the other author got those points wrong, and (3) what the other author might study or consider to change his/her perspective.</p> |

From Carbaugh, E.M. & Doubet, K.J. (2016). *The differentiated flipped classroom*. Thousand Oaks, CA: Corwin Press. p.76.

## Tri-Mind Example – Geometric Sequences (Heather Waller)

| Task Options (Choose One)  |   |  |
|--|---|--|
| Analytical   | Practical   | Creative   |
| <ul style="list-style-type: none"> <li>Present a step-by-step approach to identifying common differences/ratios and extending arithmetic/geometric sequences to at least seven terms for your classmates. Include examples with your steps.</li> <li>Include a defense of your approach that argues for its soundness</li> <li>Make sure to define the types of sequences and the terms common difference and common ratio.</li> </ul> | <ul style="list-style-type: none"> <li>Think of some times you have used arithmetic and geometric sequences in your everyday life.</li> <li>Explain <b>how</b> you used these sequences and <b>why</b> it was helpful and important to use this process.</li> <li>Make sure to define the sequence types, identify the common difference/ratio for your sequences and what these terms mean, and extend the sequences to at least seven terms.</li> </ul> | <ul style="list-style-type: none"> <li>Create a new arithmetic and geometric sequence that extends to at least seven terms.</li> <li>Come up with a context or story about where this sequence comes from or means.</li> <li>Design a visual to clarify the terms in your sequence.</li> <li>Make sure to define the types of sequences and common difference/ratio. Identify the common difference/ratio for your sequences.</li> </ul> |

From Carbaugh, E.M. & Doubet, K.J. (2016). *The differentiated flipped classroom*. Thousand Oaks, CA: Corwin Press. p.76.

## Tri-Mind: Evaluating a Scientific Argument/Claim

| Analytical Thinking Task  | Creative Thinking Task  | Practical Thinking Task   |
|---|---|---|
| <p>Use a chart, diagram, or table to depict and analyze the strengths and weaknesses of [this author's/scientist's] scientific claims, evidence, and reasoning. Include an explanation that reflects your analysis and supports the conclusions you're drawing.</p> | <p>Imagine you are going to interview [this author/scientist] on your radio or TV show regarding the scientific claims and evidence in the article you read. Generate a list of questions that probe his claims, evidence, and reasoning. Explain why you are asking each question—that is, what in or about the argument is prompting you to pose each question.</p> | <p>Take on the voice of someone impacted by this [author's/scientist's] claim and create a response that either supports or refutes the claim. In either case, be sure to situate the claim in reality and probe his claims, evidence, and reasoning accordingly, explaining <u>why</u> you are supporting or challenging them.</p> |

Dr. Jessica Hockett '13

## TriMind Example: Characterization

Direct and Indirect Characterization in "The Necklace" – Rebecca Bunker

| Analytical  | Creative  | Practical   |
|---|---|---|
| <ul style="list-style-type: none"> <li><b>Analytical:</b> Compare and contrast the protagonist Mathilde Loisel to her husband Monsieur Loisel. Describe both of them using direct and indirect characterization. You must use examples from the text to support your response. You may either write your response or present your findings in a diagram.</li> </ul> | <ul style="list-style-type: none"> <li><b>Creative:</b> Pretend you are Monsieur Loisel. How would you describe your wife Mathilde Loisel? Use direct and indirect characterization to describe her. You must use examples from the text to support your response. Be sure to take on Monsieur's voice in your response.</li> </ul> | <ul style="list-style-type: none"> <li><b>Practical:</b> Think of one of your friends. Describe him or her using both direct and indirect characterization. Is your friend more similar to the protagonist Mathilde Loisel or her husband Monsieur Loisel? How are they similar? You must use examples from the text to support your response.</li> </ul> |

Book: pp. 216-222



# Tri-Mind

- A STRATEGY FOR DESIGNING INSTRUCTIONAL TASKS AND ASSESSMENTS THAT CONTAIN ANALYTICAL, PRACTICAL, AND CREATIVE ELEMENTS

Teachers can differentiate according to student

Readiness

Interest

Learning Profile

when the goal is

when the goal is

when the goal is

Academic Growth

Motivation

Efficiency

Based on Tomlinson, 2014

## Differentiation

Tomlinson, 2014

is a teacher's proactive response to learner needs

shaped by mindset

and guided by general principles of differentiation

Building Classroom Community

High-Quality Curriculum

Ongoing Assessment

Flexible Grouping & Management

Teaching Up thru Respectful Tasks

Teachers can differentiate by adjusting

### Content

The "stuff" that students grapple with to reach the learning goals

### Process

How students take in and make sense of the content

### Product

How students show their knowledge, understanding, and skill

according to patterns in student

### Readiness

Where a student is in his or her grasp of learning goals at a certain point in time

### Interest

Passions, affinities, kinships that motivate learning

### Learning Profile

How a student prefers or seems to learn best

using a variety of strategies.

## Community = Differentiation's Affective Foundation



# Survey Says!

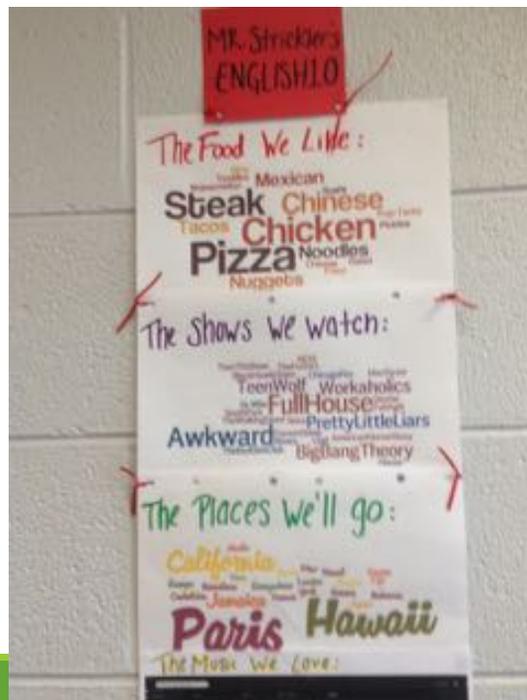
- ✓ Form a sub-group of 3 people.
- ✓ Assign each group member to study one of the inventories on the following pages
  - Page 12
  - Page 13
  - Page 88
- ✓ Be ready to share what portions/ items would be good for your student.
- ✓ Share your impressions in turn—and add your own ideas to those of your colleagues



# Content Area Connections



- **Math**
  - Fact Facts
  - Pie Charts
- **Science:**
  - My Periodic Table – The Elements of Me
  - A Topographical Map of my Life
  - My Personal Ecosystem
- **Social Studies:**
  - Unearthing Me: My Primary Sources and Artifacts
  - A Timeline of my Life
- **Language Arts:**
  - Soundtrack of my Life
  - Personal Crest



What are your goals after high school: I want to become an RN. I want to give back.

the cold.

# Your Theme Song:

Think about the music you enjoy. Choose one song to be your "anthem." Make sure it's representative of you!

Song Title: Let it go Artist: Demi Lovato

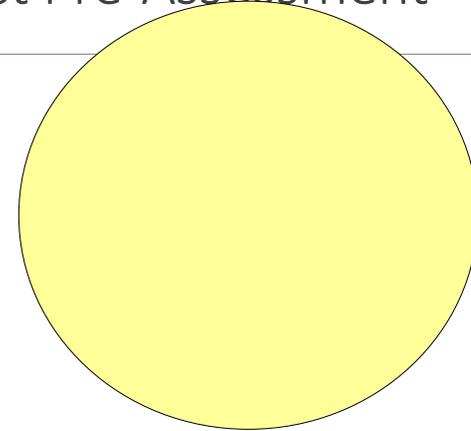
Lyrics that Most Represent You:

A Kingdom of isolation and it looks like im the Queen.

Explanation: I'm kind of alone a lot I stick to myself. It's easier than losing someone you love so it's just me and my books most of the time.

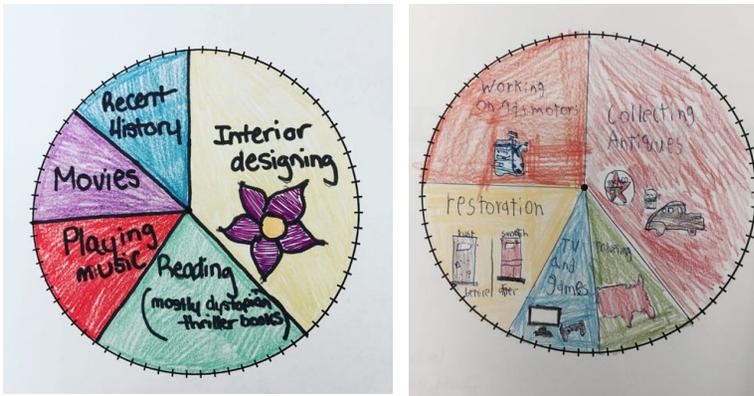
Miss Berkman & Mr. Uyenda  
September 2014

## Interest Pre-Assessment



Design a Pie Chart to show what you're interested in. Make at least 5 sections; represent your interests in decimals, fractions, and percents.

## Pie Charts to be used later to introduce Percentages and Probability



JFHMS - 7<sup>th</sup> Grade

## Pie Charts using Paper Plates – Also a Pre-Assessment on Percentages



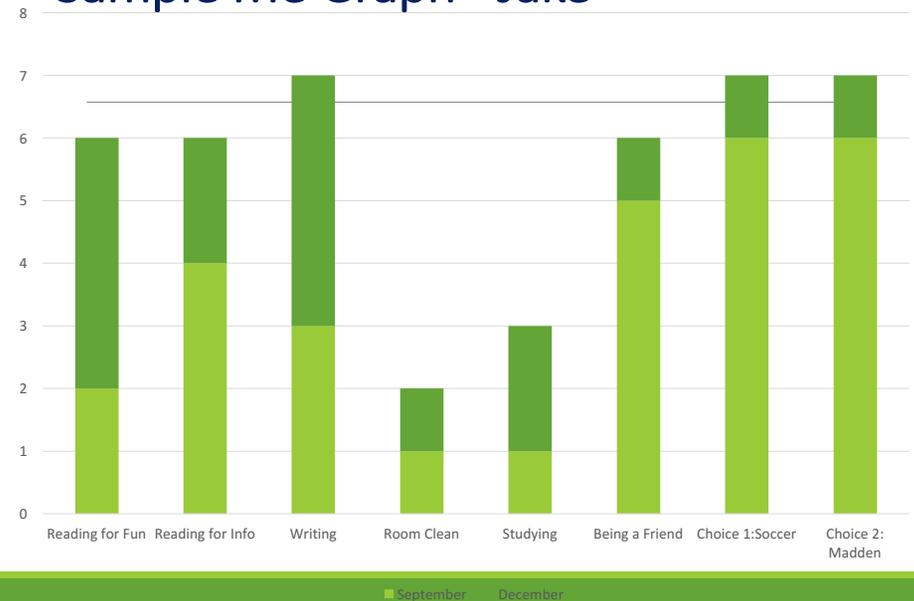
This Assessment is aligned to

## Me-Graphs



- List items on X-axis
  - Class items (all)
  - Low Stress items (all)
  - Personal choice items (individual)
- Y axis represents student's skill/comfort level
- Post Graphs and make comments and generalizations
- Adapt as year progresses

## Sample Me Graph - Jake



*Community is not just about Teacher and Student; rather, it's about Students and their Peers*

BUILDING COMMUNITY



## Shake 'n' Share

A strategy for engaging learners in quick conversation around different aspects of a topic or concept.

Greeting Question:  
Cats or Dogs?

Explain why teaching/leading in schools is harder than it looks.

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Greeting Question:  
Salty or Sweet Snack?

How is teaching like popping popcorn? What else is it like? (Make a metaphor.)

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Greeting Question:  
iPhone or Android

Discuss the advantages of a collaborative classroom from the perspective of a parent or student.

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Greeting Question:  
Rainy Days – Thumbs UP or DOWN?

Why might collaborative classrooms be difficult for some students?

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Greeting Question:  
Disney Land or Disney World?  
(OR California or Florida)

What's one thing you *now* know about managing active classrooms that you wish you would've known on your first day?

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## Shake 'n' Share Prompts: Community-Building

**Turn 1:** Choose one word to describe your weekend. Explain why you chose this word.

**Turn 2:** What's your favorite thing for breakfast? What makes it the best thing for breakfast, in your opinion?

**Turn 3:** How is school like a shopping mall? What else is it like?

**Turn 4:** "I don't know how to \_\_\_\_\_, but I think it would be cool to learn to \_\_\_\_\_ because...."

**Turn 5:** What three things do you wish you had known about [last year's grade level] that you know now?

**Turn 6:** What's one thing you would do to improve the physical environment of this classroom?

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## Shake 'n' Share Prompts: Science Review

### Explain

Explain what a cell is and how it works. Use the words balance, system, structure, and function if you can.

### Interpret

How is a cell like a car? What else is it like?

### Apply

What would happen to other structures in a cell if the nucleus stopped working? Be specific!

### Have Perspective On

How and why are plant and animal cells similar and different?

### Empathize

Put yourself in the shoes of a cell membrane. What would you "let in"? Not let in? Why?

### Self-Reflect

How could you best show what you understand about cell transport?

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Based on Wiggins & McTighe's Six Facets of Understanding

Discuss how you might use this in your classroom.  
What are the benefits?



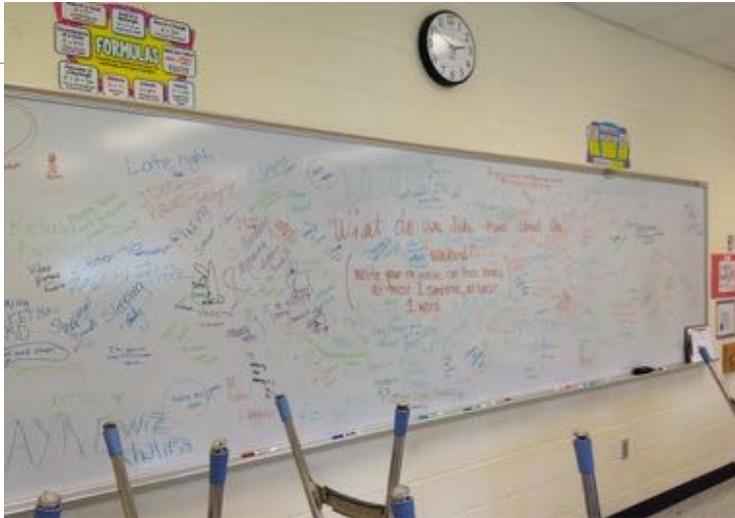
## Shake 'n' Share

A strategy for engaging learners in quick conversation around different aspects of a topic or concept.

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## Kelly's Twist



Kelly Freehill – Via Twitter – September 7, 2012

## Workshop Driving Questions

What is differentiation? What are its foundational principles?

**How can we discover student needs – both as a group and as individuals?**

How can teachers differentiate for student readiness, interest, and learning profile?

How can teachers manage differentiation and make it “work”?

## Interaction = Differentiation's Social Foundation



## Tea Party

- You'll form groups according to the color of your card.
- Meet in the corresponding area of the room.
- Stay standing when you get there!



Front of the room

Blue

Pink

Purple

Orange

Green

## Tea Party



- You'll have 30-45 seconds to share what's on your cards and make predictions, ask questions, etc.
- When time is called, pair up with a new group member (same-colored card) and repeat the process until notified.
- Make sure you reference the previous card(s) you've seen in each new grouping/discussion
- Return to your table when time is called.

## Tea Party: We Think...



As a small group, write a brief "We think" statement that predicts what the article might be about and why.

*"We think this article is about...  
because..."*

## Read the Article

*As you read, use these **Logographic Cues**:*

- ✓ = I knew that!
- ★ = Important information/statistic/quote
- ? = Debatable or Questionable idea
- ! = Interesting... I want to explore this further
- 

*After you read:*

- Go back and underline the phrases from the colored cards.
- What did you predicted correctly? What surprised you?
- Be ready to discuss with your group.

## Discussion



**Connections:** What connections do you draw between this study/article and your own life or learning?



**Challenge:** What ideas, positions, or assumptions do you want to challenge or argue with in the study/article?



**Concepts:** What key concepts or ideas do you think are important and worth holding onto from the study/article?



**Changes:** What changes in attitudes, thinking, or action are suggested or reflected by the study/article, **for middle and high school teachers?**

|   |   |
|---|---|
| <p><b>1. Make a claim and explain your rationale.</b> Say what you think, and why.</p>  | <p><b>2. Add or supporting evidence for the claim.</b> Read your peer's claim. In this box, add something that would <i>support</i> that claim or make it stronger.</p> |
| <p><b>3. Make a counter-claim or provide evidence that challenges the claim.</b> In this box, make a claim or provide evidence that <i>argues against</i> what is written in boxes 1 and 2.</p> | <p><b>4. Add your "two cents."</b> Read what is written in the three boxes. Add your opinion and your reasoning in this box.</p>  |

|  |   |
|--|---|
| <p><b>1. Make a claim and explain your rationale.</b> Say what you think, and why.</p> <p><b>The most powerful/important portion of this text is _____</b><br/> <b>Because: _____</b><br/> <b>[explain the idea's virtues]</b></p>   | <p><b>2. Add or supporting evidence for the claim.</b> Read your peer's claim. In this box, add something that would <i>support</i> that claim or make it stronger.</p> <p><b>You can include your own ideas and/or cite those from the readings.</b></p> |
| <p><b>3. Make a counter-claim or provide evidence that challenges the claim.</b> In this box, make a claim or provide evidence that <i>argues against</i> what is written in boxes 1 and 2.</p> <p><b>You can point out weaknesses in the portion or suggest strengths of a different portion. Include your own ideas and/or cite those from the readings.</b></p> | <p><b>4. Add your "two cents."</b> Read what is written in the three boxes. Add your opinion and your reasoning in this box.</p> <p><b>You can include your own ideas and/or cite those from the readings.</b></p>  |

|   |   |
|---|---|
| <p><b>1. Solve the problem and show how you solved it.</b></p>  | <p><b>2. Check the solution.</b> Review the process and solution in Box 1. Give two reasons you think it is correct or incorrect.</p>   |
| <p><b>3. Provide another way of solving the problem.</b> Solve this problem in a way that's different from the process used in Box 1.</p> | <p><b>4. Detect errors and misconceptions.</b> Note any errors or misconceptions you see in Boxes 1, 2, or 3. If you don't see any, explain why you agree with what is written.</p> |

## Now...

- Read what was written your own paper.
- In your group, identify the 2-3 strongest arguments or points. (It doesn't matter who wrote them.)

*Book: p. 118-119*



## LOGOGRAPHIC CUES

A STRATEGY DEVELOPED BY KYLENE BEERS (2002) IN WHICH STUDENTS COME UP WITH VISUAL SYMBOLS, OR *LOGOGRAPHS*, TO SERVE AS SIGNPOSTS IN THEIR READING THAT ALERT THEM TO IMPORTANT ASPECTS OF THE TEXT OR NARRATIVE.

*Book: p. 96*



## Tea Party (a.k.a. Puzzle Pieces)

A STRATEGY THAT INVITES STUDENTS TO ENGAGE WITH OR STUDY SMALL PIECES OF A TEXT THEY'LL BE READING TO BUILD INTEREST IN WITH AND MAKE PREDICTIONS ABOUT THE TEXT (BEERS, 2002)

*Book: pp. 132-134*



## Debate Team carousel

ASKS STUDENTS TO ENGAGE IN THE PROCESS OF CLAIM/COUNTER CLAIM WITH EVIDENCE (INCLUDING TEXTUAL SUPPORT); ALL STUDENTS BOTH "TALK" AND "LISTEN"

*A differentiated  
classroom is first  
an interactive  
classroom.*