



Welcome!



Student Engagement Via the Danielson Clusters

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Outcomes for Today

- ◆ Dig into the definition of "student intellectual engagement" to deepen understanding
- ◆Investigate thinking routines that operate as tools for promoting learning and identify tools that might be useful in classrooms
- Explore brain research and its implications for engaged learning

Let's take a poll on the outcome most interesting to you.







3-2-1 Bridge Student Engagement

- •3 Words
- 2 Questions
- 1 Simile/Metaphor





- 1. Read Cluster 4: "Student Intellectual Engagement" on the handout provided.
- 2. Complete the sentencephrase-word routine.





Sentence-Phrase-Word

Review the cluster's document you just read and select:

- A. A sentence that was meaningful and deepened your understanding of Cluster 4.
- B. A phrase the moved, engaged, provoked or was in someway meaningful to you.
- C. A word that captured your attention or struck you as powerful.

Write your sentence, phrase and word on 3 different post-itudiotesuting for Danielson Group, 2013





Cluster 4: Student Intellectual Engagement

- 1. Share your responses and explain why you selected the sentence, phrase and word.
- 2. Post your thoughts.

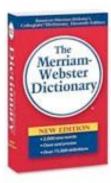




Think (ing)

- Think(ing) was used 7 times in Danielson's brief discussion of engagement.
- Think is the 12th most used verb in the English language.
- Think as a word ranks in the top 125

in terms of frequency in print.





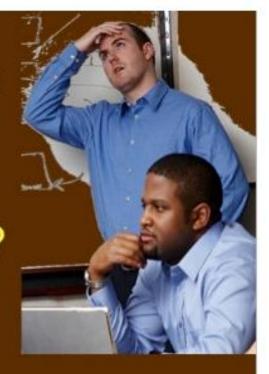






You actually know a lot about Bloom's Taxonomy of the Cognitive Domain.

You don't believe it?



Take the following Pop Quiz to find out how much you already know, and why this information is important for you, as a trainer or teacher, to use.





Choose one response that best completes the sentence:

Benjamin Bloom was ...

A. a classy dresser known for his style.

B. an educational psychologist who classified thinking skills into 6 different levels.

C. a professional gardener and lifelong flower-lover.



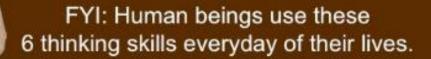


Of course you chose B!

Benjamin Bloom was an educational psychologist who classified thinking skills into 6 different levels.

Professor Bloom gave his list a fancy name:
A Taxonomy of the Cognitive Domain.
Translated, this meant:

6 Thinking Skills.







Pop Quiz #2

The 6 thinking skills that Professor Bloom identified were (choose one response):

A. Grumpy, Happy, Sleepy, Dopey, Bashful, and Fred.

B. sitting, crawling, standing, walking, jogging, and running.

C. knowledge, comprehension, application, analysis, evaluation, and synthesis.





Right again! The answer is C.

The 6 thinking skills that
Professor Bloom identified were:
knowledge, comprehension, application,
analysis, evaluation, and synthesis.

Over time, the 6 thinking skills have been translated into simpler words that are easier to remember.





Pop Quiz #3

The words being used by educators and trainers today to describe thinking skills are (choose one list of words):

A. remembering, understanding, applying, analyzing, evaluating, creating.

B. what, where, how, why, when, what if.

C. noncognitive, metacognitive, subcognitive, super-cognitive, mono-cognitive, multi-cognitive.





The words being used by educators and trainers today to describe thinking skills are: remembering, understanding, applying, analyzing, evaluating, creating.

On the next slide is a quick description of what each thinking skill means for adult learners in traditional learning environments like classrooms.





6 Thinking Skills (Lower to Higher) for Adult Learners:

Remembering: memorizing and recalling content.

Understanding: explaining and paraphrasing content.

Applying: using content in a real-life setting.

Analyzing: dividing content into its logical parts.

Evaluating: judging content in order to make a decision.

Creating: putting content together in new ways.





Pause the slides now and get a pencil and blank paper (worksheet). Then click to the next slide.



Take a moment to write the 6 thinking skills (lower to higher) on your worksheet so that you will remember them:

1. Remembering (lower)

2. Understanding (lower)

3. Applying (lower)

- 4. Analyzing (higher)
- 5. Evaluating (higher)
- 6. Creating (higher)

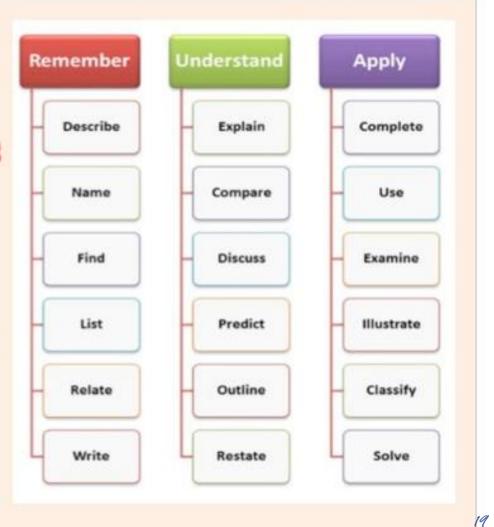






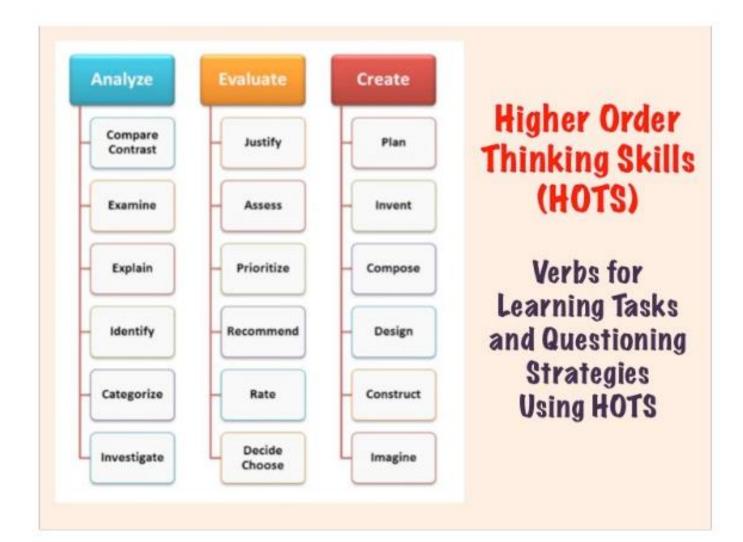
Lower Order Thinking Skills (LOTS)

Verbs for Learning Tasks and Questioning Strategies Using LOTS













Why lower to higher?

Because Benjamin Bloom
believed that learners first need to
use the LOTS (Lower Order Thinking
Skills: remembering, understanding,
and applying) before they can
use the HOTS (Higher Order
Thinking Skills: analyzing,
evaluating, and creating).

What do YOU think?





Pop Quiz #4

Choose one response that completes the sentence:

I think that ...

- A. Bloom was right and the thinking skills DO take place from LOTS to HOTS (lower to higher).
- B. Bloom was wrong. They are NOT hierarchical skills but happen as learners need to use them.
- C. Six of one; half-a-dozen of another!





A case can be made for both A and B.

There really is no right or wrong answer, and the debate goes on ...

But for now, we'll stick with calling them LOTS (Lower Order Thinking Skills) and HOTS (Higher Order Thinking Skills) because:







A. LOTS – remembering, understanding, and applying content – doesn't take as much mental energy as HOTS – analyzing, evaluating, and creating content.

B. There is a "struggle" (challenge) in using HOTS that deepens the learning in ways that may not happen when using LOTS alone.

C. With HOTS, learners take ownership of the content by analyzing it, judging its worthiness, changing it to make it work better for them, and creating new uses from it.

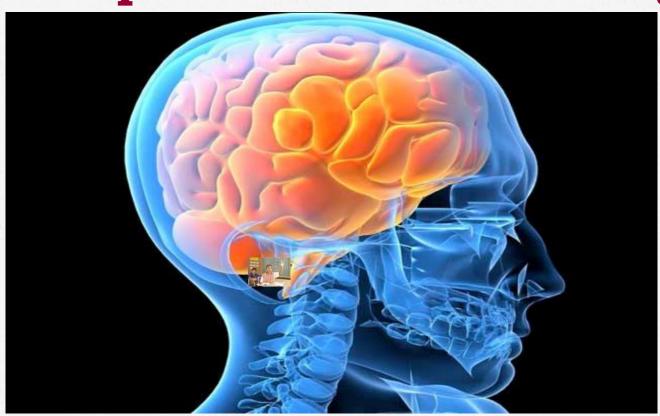
How did you do?







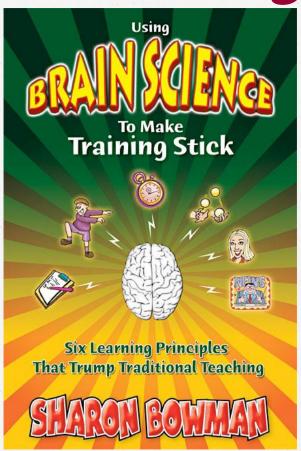
6 Learning Principles That Trump Traditional Teaching







Using Brain Science to Make Training Stick







Windowpane Lecturette

- Take a blank piece of paper and follow folding directions. (You will end up with 6 boxes.)
- Draw an image and write a word or two for each learning principle.











"Exercise boosts brain power." John Medina

We THINK better when we insert movement into our daily activities, including those places where we sit a lot. 31

The point?

In order to learn better, the brain needs oxygen.

The best way to get oxygen to the brain is to MOVE.

Students need to MOVE often in order to learn better.



Principle #2





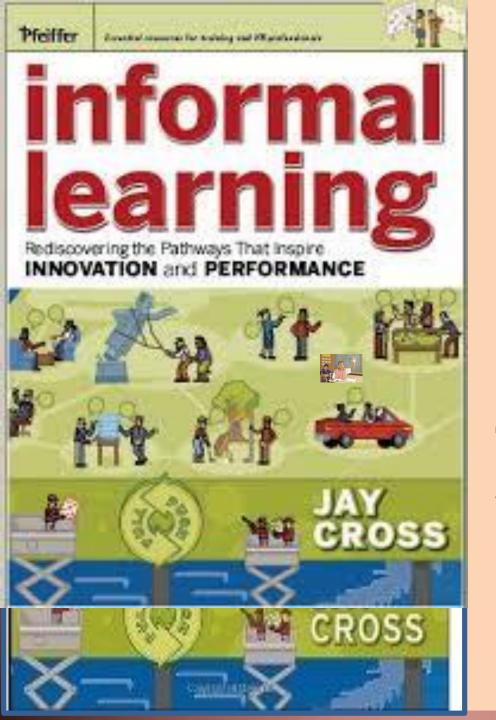




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"We humans exist in networks. Learning is social. We learn from, by, and with other people."

Jay Cross

The person doing the most talking about the subject is doing the most learning about the subject.

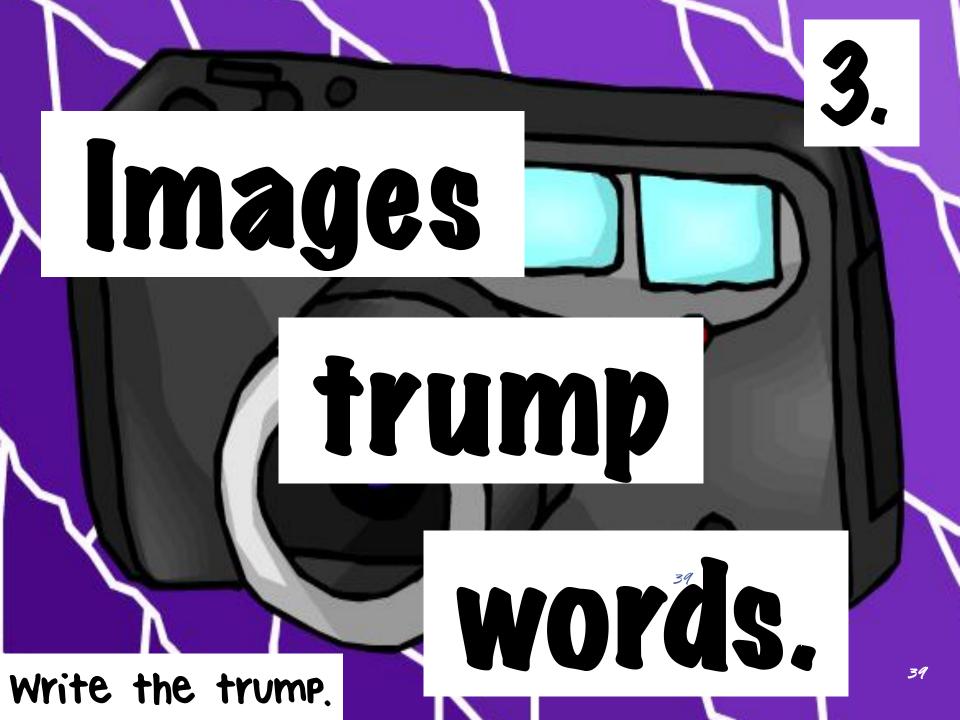
Have students teach each other what they have learned from you.

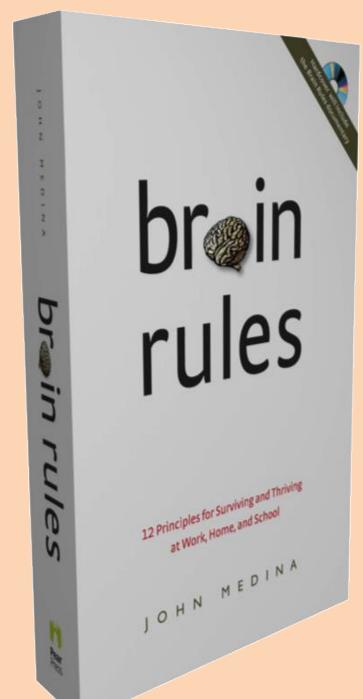




Principle #3







"Vision trumps all other senses."

"The more visual the input becomes, the more likely it is to be recognized and recalled."

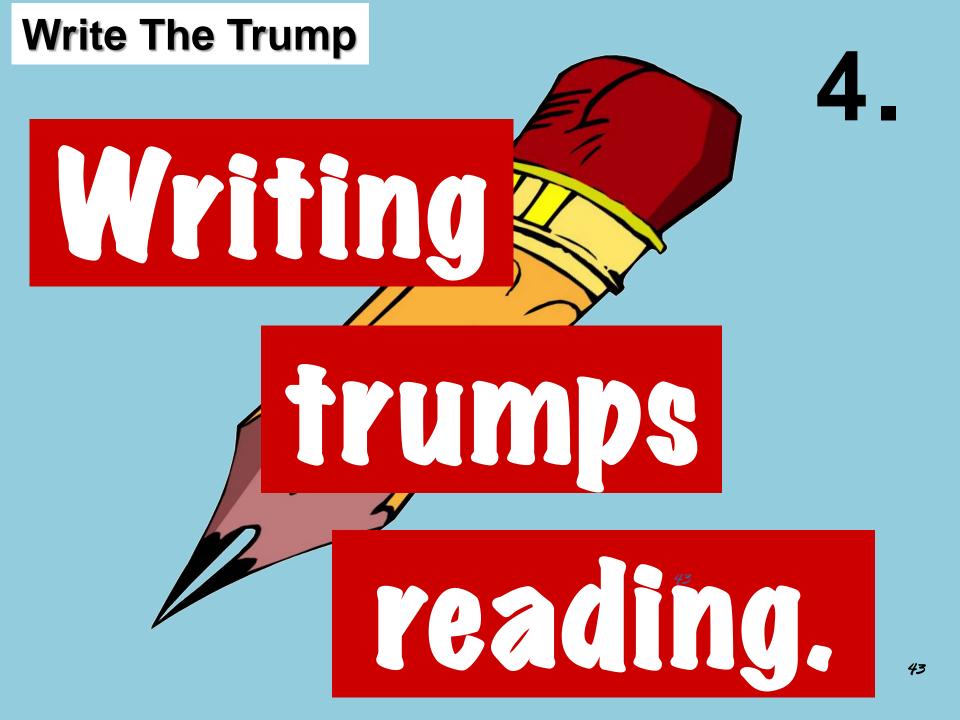
John Medina

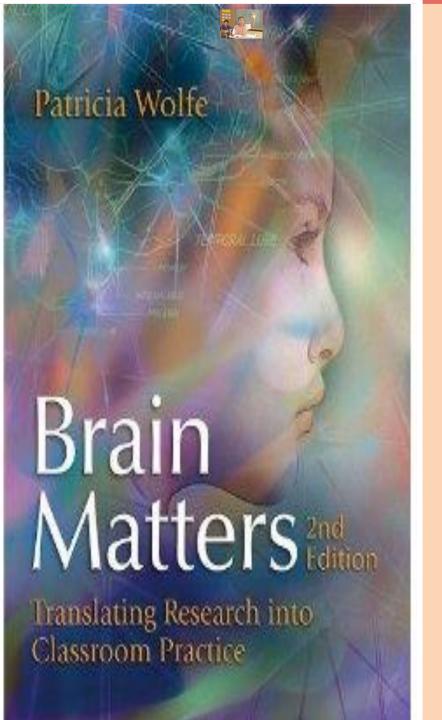
Use images to teach content.

Images are ANYTHING visual: stories, case studies, metaphors, analogies, demonstrations, skits, as well as photos, videos, other visual aids, and graphic organizers.









"Writing and thinking are strongly linked. Writing serves as a tool for refining thinking."

Patricia Wolfe

Students will remember what THEY write longer than what YOU write.

Have students write to remember.



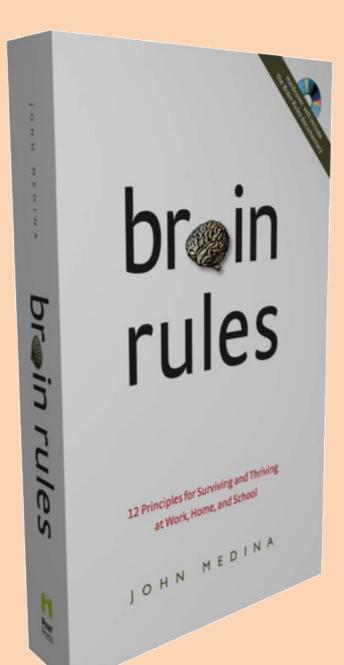


Principle #5



Write The Trump Shorter trumps

longer.



"Before the first quarter-hour is over in a typical presentation, people usually have checked out. What happens at the tenminute mark to cause such trouble?"

John Medina

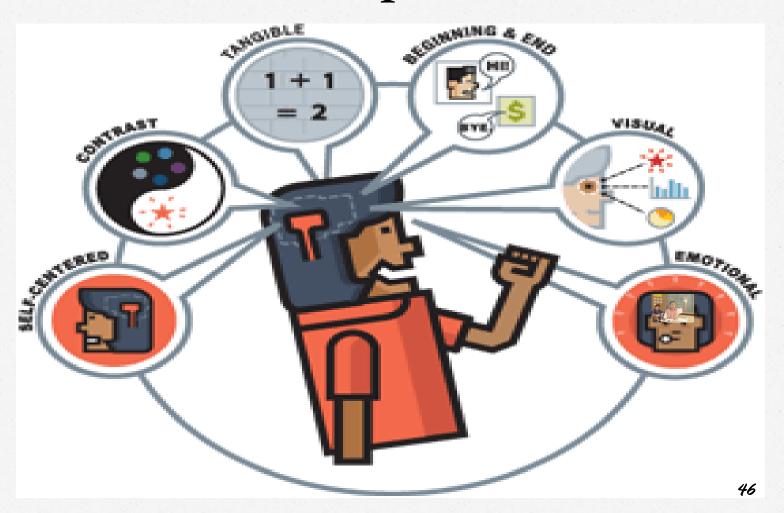
Engage learners every 10/20 minutes.

They need to DO something: write, talk, stand, stretch, teach, repeat, draw, paraphrase, ask, answer.

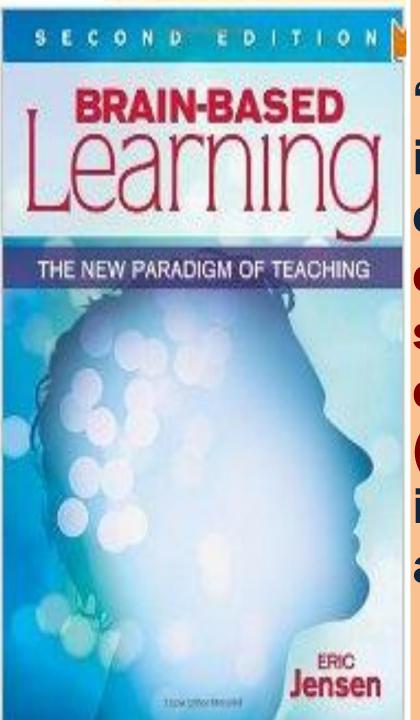




Principle #6







"Any stimuli introduced into our immediate environment which is either new (novel) or of sufficiently strong emotional intensity (high contrast), will immediately gain our attention."

Eric Jensen

The brain quickly ignores anything that is routine, repetitive, or boring.

Use novelty, contrast, meaning, and emotion to get, and keep, students' attention.





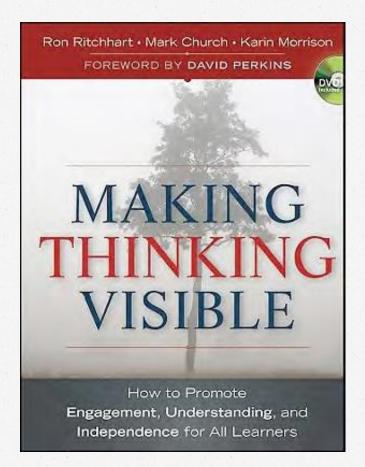
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Headline

Write a headline for this breakout

session'







Thank you!!

