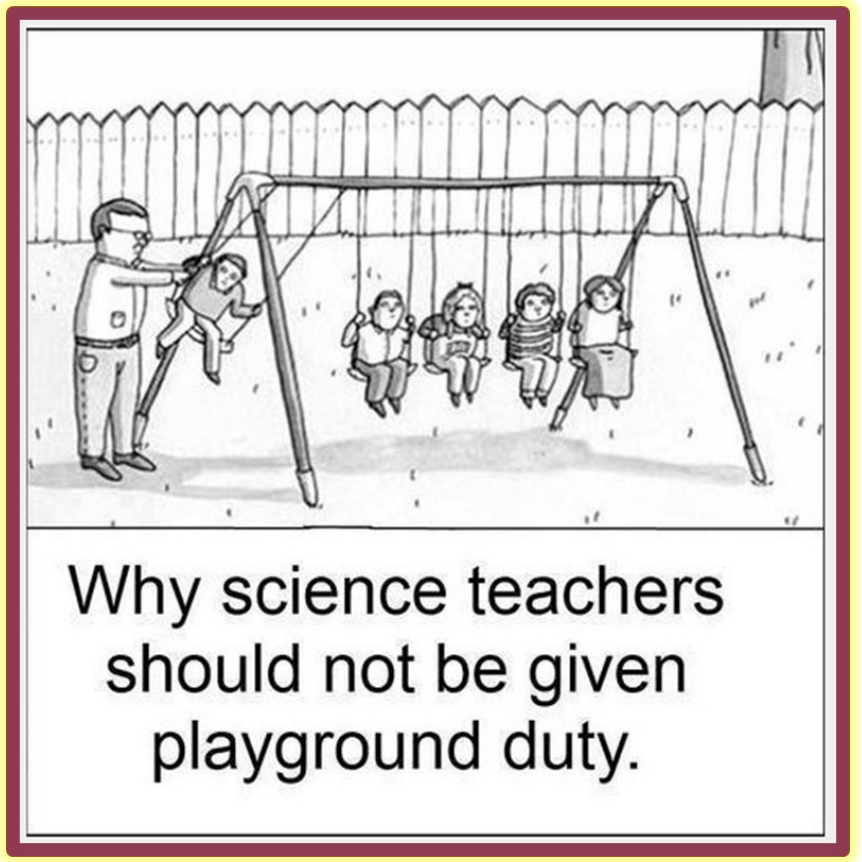
THE GOVERNOR JOHN ENGLER
CENTER FOR CHARTER SCHOOLS
CENTRAL MICHIGAN UNIVERSITY

DO NOW

Complete the following analogy and simile in your packet. Then discuss with your shoulder partner.

Engaging students is to _____ as _____ is to _____.

Getting students to pay attention is like _____.



COURSE 103: Entertain the Brain!

Increasing Cognitive Engagement of Students

Facilitated by Valerie Bailey | School Performance Manager
The Governor John Engler Center for Charter Schools at Central Michigan University

TODAY'S OUTCOMES

- Analyze the connections between engagement and assessment
- Recognize engagement techniques that increase rigor and cognitive processing
- Identify actionable techniques that will increase student engagement (Around 61 today!)
- Develop an action plan to increase active learning in your building

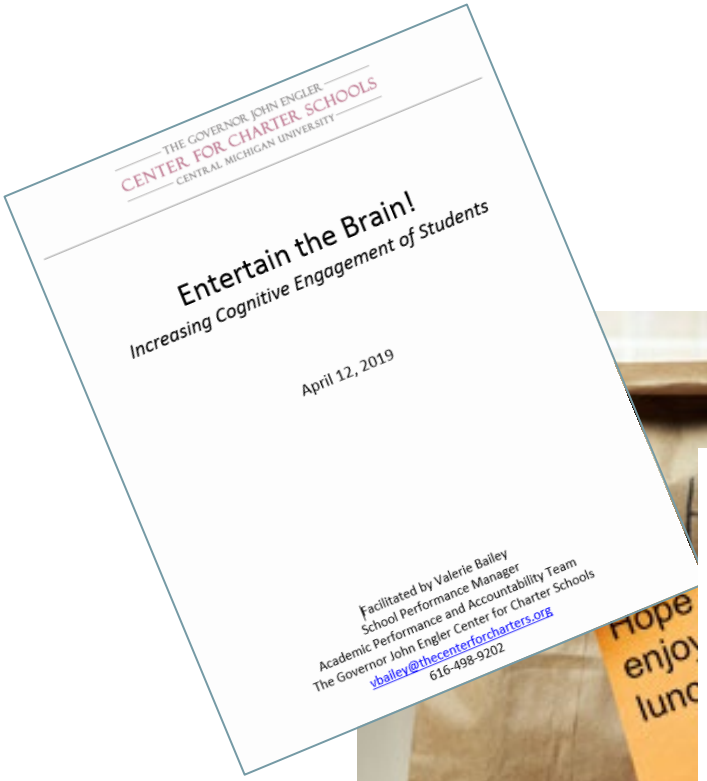
Turn and Talk to Meet Your Neighbor

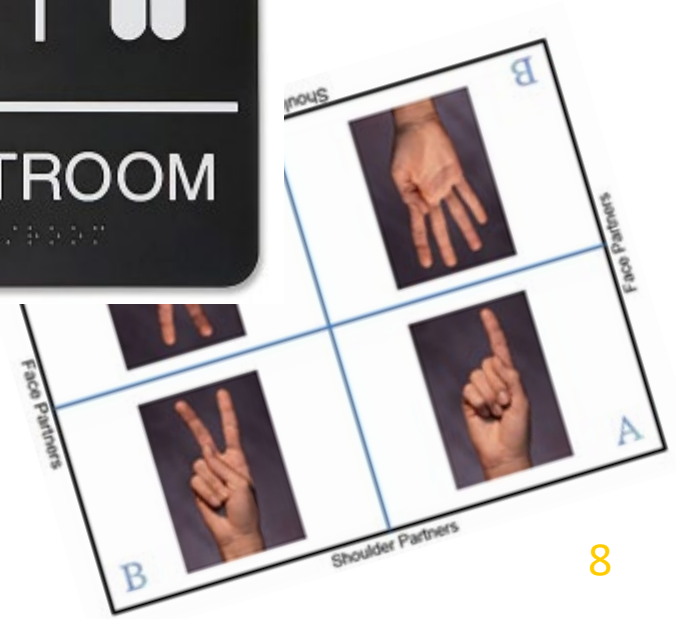
- Educator for 19 years; M.Ed.
- Middle School ELA Teacher
- Writing Specialist
- Curriculum and Instruction Specialist
- Consultant/Facilitator

GOOD NEWS!

GROUP AGREEMENT

HOUSEKEEPING





WORLD TRAVELER	NEXT MASTERCHEF	AVID READER	OUTDOOR LOVER	MUSICIAN
SPORTS FANATIC	SHOPAHOLIC	DREAMER	LIFELONG LEARNER	EXTROVERT
PEOPLE WATCHER	DO-IT-YOURSELF EXPERT	ARTIST	EDUCATION NEWBIE (2 OR LESS YEARS)	MOVIE BUFF
INTROVERT	NIGHT OWL	SOCIAL BUTTERFLY	DANCER	EARLY BIRD
SHOWER SINGER	FAMILY-FOCUSED	CAFFEINE DEPENDENT	PHOTOGRAPHER	SHOE FANATIC

1. Put your initials in the TOP of each box that accurately describes you.

2. Mingle and put your initials in the BOTTOM of *ONE* box on another's paper that represents you.

The first person who completes 2 lines in any direction wins!


① Why does Jem cry when the hole
is filled with cement?
② Who are Scout and Jems parents?
③ What is "hot steam"?
④ Who is Miss Maudie?
⑤ What are 3 details which
⑥ Why do the people of Maycomb
lleys?

THINK-WRITE-PAIR-SHARE

- THINK about how assessment and rigor impact or connect to student engagement.
- WRITE a brief summary of your thoughts, highlighting key ideas that demonstrate the impact or connections.
- PAIR-SHARE with your 9 o'clock partner.

ENGAGEMENT CONTINUUM

Disengaged (complete disinterest and lack of motivation)	**Compliant** (willingness to perform at required level of behavior and cognition)	**Engaged** (active learning with cognitive challenge and piqued interest)
• Sleeping • Reading* • Doing other work • Writing notes* • Talking* • Playing around • Getting out of seat* • Using technology* **When not intentional for purpose of the lesson*		

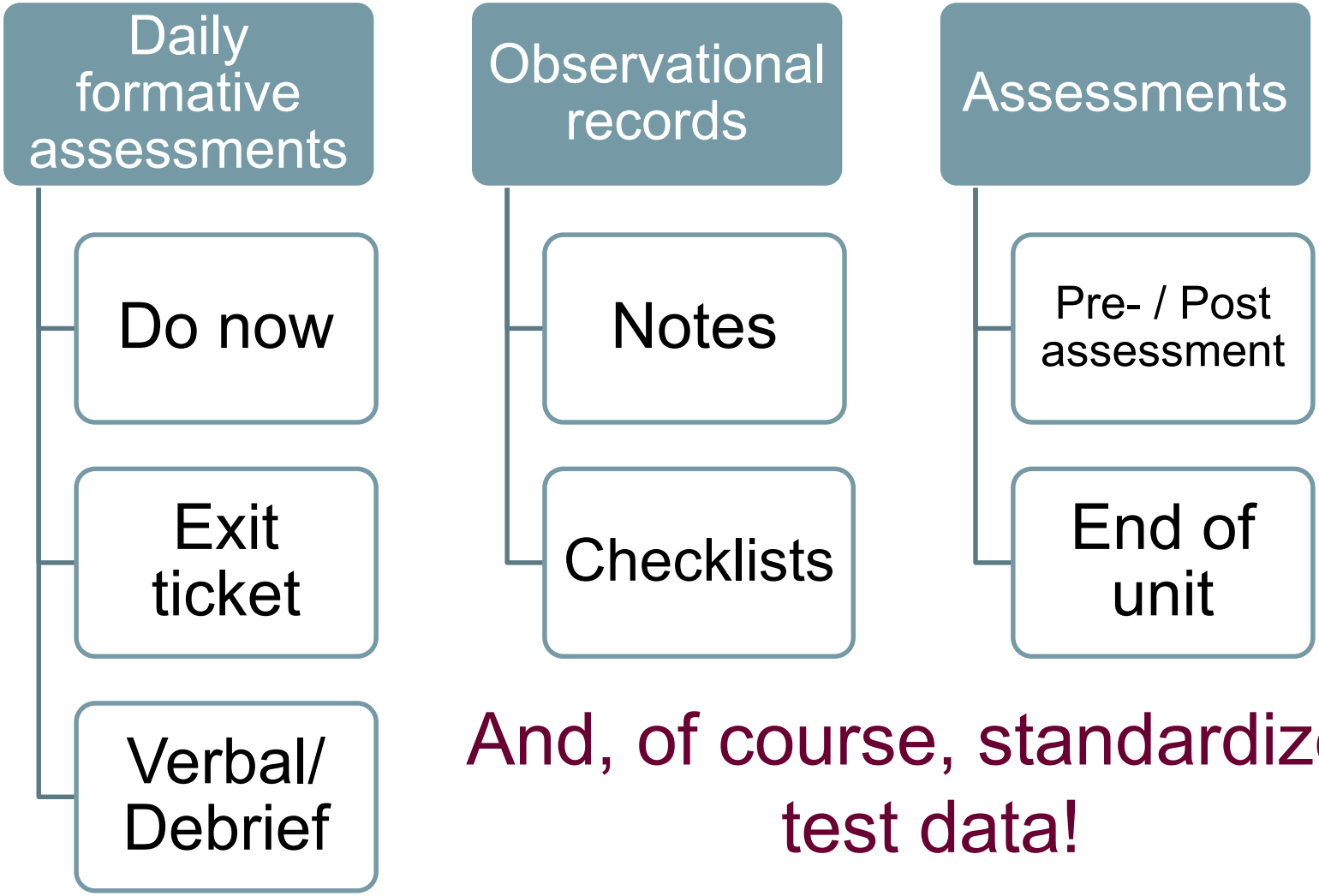
ASSESSMENT

- Pre-assessment
- Post-assessment
- Formative assessment
- Interim assessment
- Summative assessment
- Self-assessment

Paired Fluency: Partner A starts by saying what was written and adding anything else. Partner B will continue when prompted adding his/her own thoughts without repeating Partner A's ideas. Partner A will go again.

Source: www.pinterest.com

ASSESS, ASSESS, ASSESS



And, of course, standardized test data!

SO WHAT?

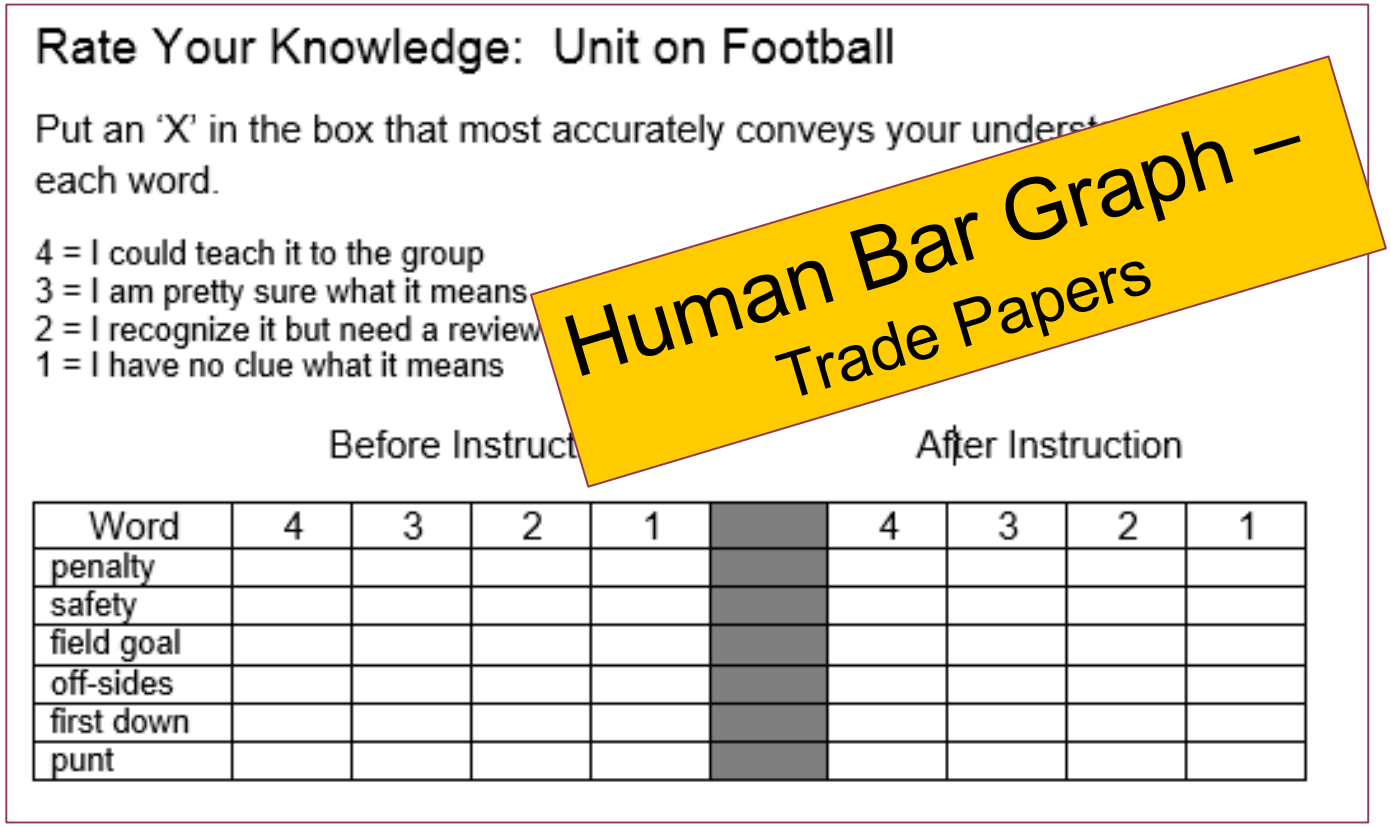
"Many districts have implemented curricul
with the new standards; new te
hands of students; a
chosen
s
cl

We need to monitor and use the data we have to prepare and DELIVER lessons that meet the readiness needs of our students and require students to be actively, cognitively engaged.

tructional
complished in every
delity."

--Robert J. Marzano and Michael D. Toth
Teaching for Rigor: A Call for a Critical Instructional Shift

RATE YOUR KNOWLEDGE



Rate Your Knowledge: Unit on Football

Put an 'X' in the box that most accurately conveys your understanding of each word.

4 = I could teach it to the group
3 = I am pretty sure what it means
2 = I recognize it but need a review
1 = I have no clue what it means

Human Bar Graph – Trade Papers

Before Instruction

After Instruction

Word	4	3	2	1		4	3	2	1
penalty									
safety									
field goal									
off-sides									
first down									
punt									

What type of assessment do you think this is?
How could you use it?

“RATE YOUR KNOWLEDGE”-BENEFITS

- Activate background knowledge/set schema
- Set purpose/goal for learning/reading
- Encourage reflection and metacognition
- Quick assessment for student and teacher to determine teaching/reinforcement

GOAL-SETTING

Discuss goal-setting with your elbow partner and the connection to reflection and metacognition. How does this look in your classroom/school?

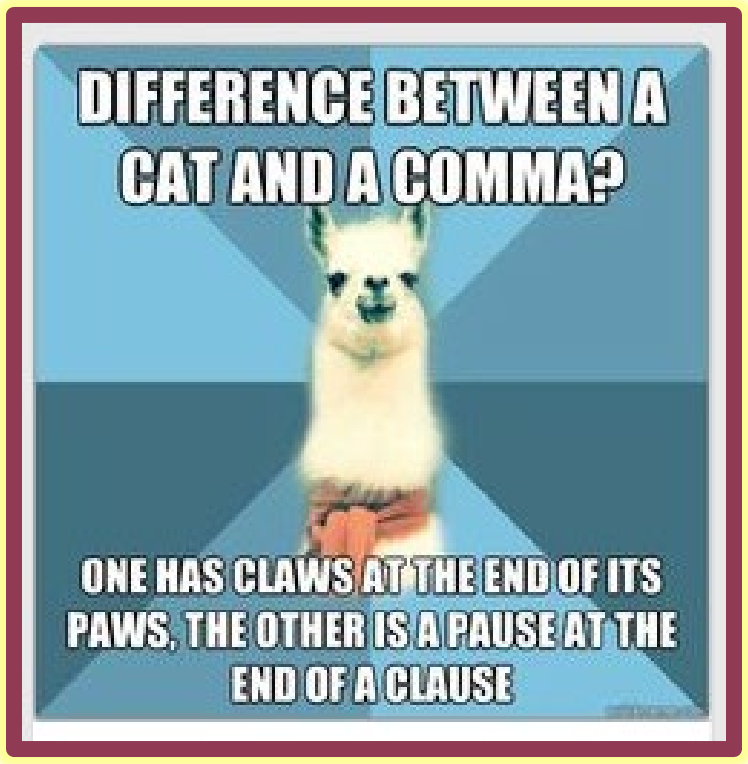
Noting What I've Learned

Draw It!	Write It!
	Concept: _____ Notes:_____ _____ _____
	Concept: _____ Notes:_____ _____ _____
	Concept: _____ Notes:_____ _____ _____
	Concept: _____ Notes:_____ _____ _____

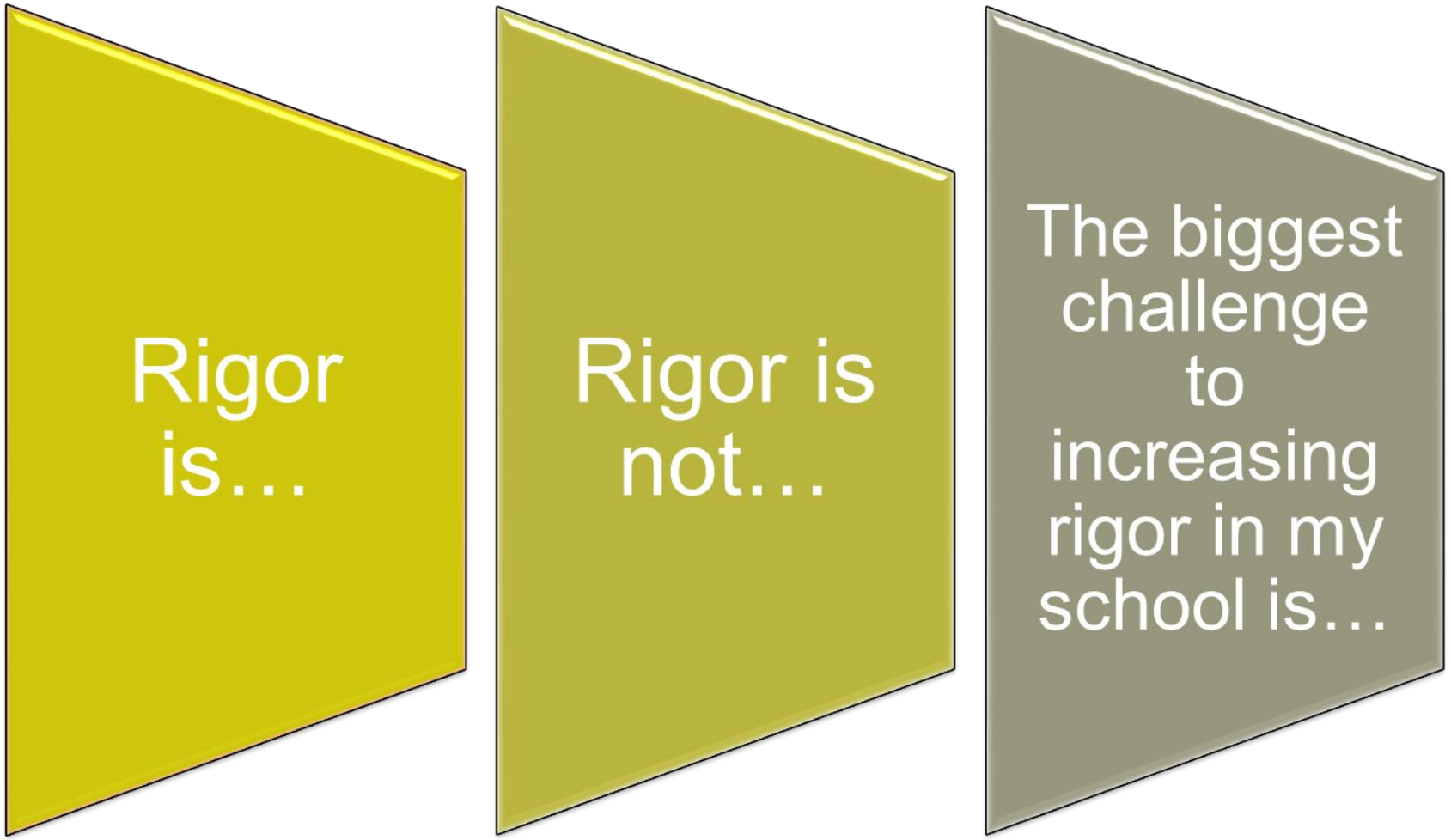
BREAK!

XV minutes!

Source: www.pinterest.com



Source: www.pinterest.com


Rigor is…
Rigor is not…
The biggest challenge to increasing rigor in my school is…

WHAT IS RIGOR?

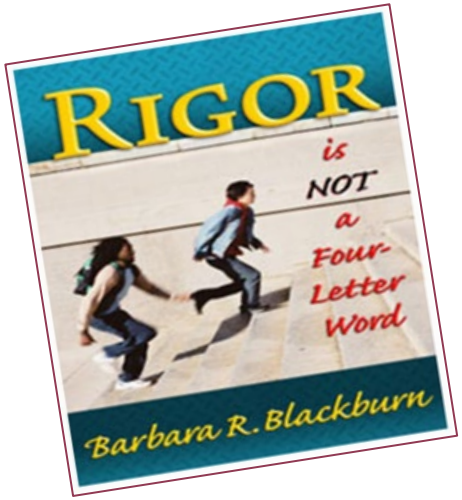
"Academically, intellectually, and/or personally challenging instruction and/or curriculum that promotes student understanding of knowledge and concepts that are complex, ambiguous, or contentious and that helps students acquire skills that can be applied in a variety of college, work and life contexts."

-Assimilated from various sources

WHAT IS RIGOR?

"Creating an environment in which each student is expected to learn at high levels, each student is supported so he/she can learn at high levels, and each student demonstrates learning at high levels."

-Barbara R. Blackburn



Review your definitions with a cross-town buddy.

EXCELLENCE IN EDUCATION
Barbara Blackburn

Source: https://www.youtube.com/watch?v=_wl52sRyFEE

R	Raise the level of content
I	Increase complexity
G	Give appropriate support and guidance
O	Open your focus
R	Raise expectations

RIGOR AND RELEVANCE

Evidence of Rigor	
Appropriately Challenging Student Work	Student products and/or observable efforts and activities demonstrate depth of content knowledge & content area connections with the skills to apply knowledge in meaningful ways.
Higher Order Thinking	Students are reflective, self-directed and productive learners who are creative & critical thinkers and problem solvers.
Inquiry & Student Response	Student responses, collaborative conversations, discussions, and presentations provide evidence of analytical skill and creativity combined with a deep knowledge of content.
Evidence of Relevance	
Appropriately Challenging Student Work	Student products or observable efforts and activities lead to real-world applications and skills.
Authentic/Real World Resources	References, tools, equipment, and technology are authentic real-world resources that go beyond textbook and worksheets.
Learning Connections	The learning experience connects to real world applications and appropriately builds on students' prior knowledge and skill.

Adapted from International Center for Leadership in Education CREC 2012 Blended Solutions Instructional Rigor Module

Adapted from International Center for Leadership in Education CREC 2012 Blended Solutions Instructional Rigor Module

RIGOR IN VARIOUS FORMS

- Rigorous **content** is cognitively complex, thought-provoking, challenging and conceptual.
- Rigorous **environments** ensure students perform at their maximum potential while building their will to persevere.
- Rigorous **skills** foster independent, self-directed and productive learners who are creative and critical thinkers, problem-solvers, and innovators

Effective instruction encompasses all three!

A LESSON IS HIGHLY RIGOROUS IF…

- ✓ Students set goals for their own learning outcomes and determine criteria for success.
- ✓ Students consistently use metacognition (without teacher prompting).
- ✓ Students participate in high-level discussions, generate questions that require a high-level of thinking, and produce writing that is supported with evidence fr…
- ✓ Students understa… strate skills for revising and reflec… work.
- ✓ Students are provid… with opportunities to participate in project-based learning that is relevant to the real world.
- ✓ Students are able to transfer knowledge and skills to other tasks; the teacher scaffolds the learning for the students.
- ✓ Students build critical thinking, communication, and collaboration skills on a daily basis.

Table Talk

DOWN WITH WORKSHEETS!

Source: www.pinterest.com

FOUR-TWO-ONE: WHAT IS THE MOST IMPORTANT ASPECT OF RIGOR?

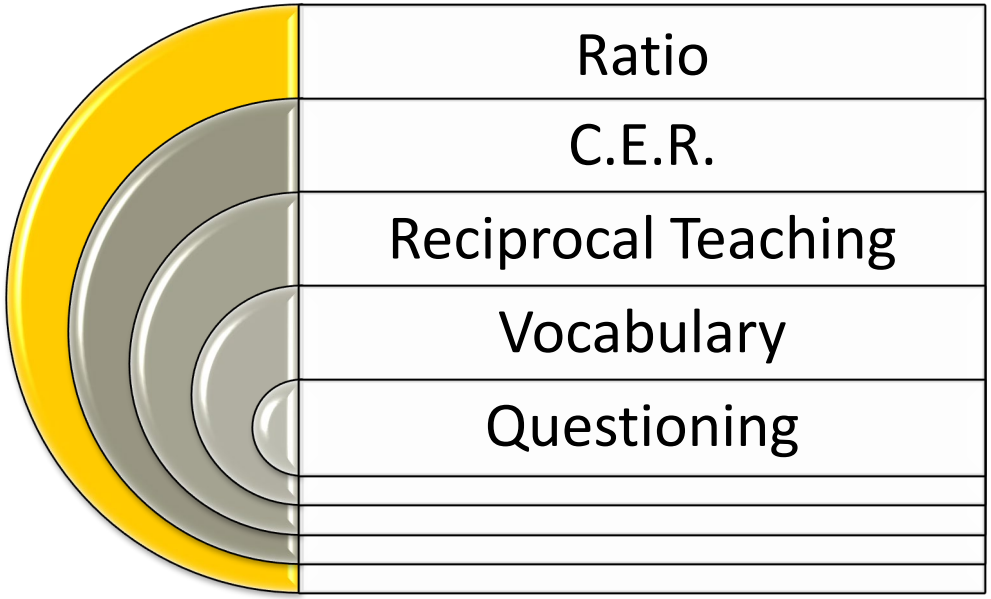
Source: www.kenludwig.com

"Students can do a lot of things during school that don't require thinking. But, they can't write coherently without thinking, and they can't speak logically about content without thinking."

-Someone Smart

BRAIN BREAK

STRATEGIES TO ENHANCE COGNITIVE PROCESSING



RATIO

- The overall goal is to give st… the most practice … apply what they … as much as they can, … all the work as soon as they are ready. *(Participation)*
- The cognitive work must be on-task, focused, and productive. *(Thinking)*

Don't steal their struggle!

Teachers tend to emphasize the participation ratio. Engagement is definitely about that participation ratio, but the rigor comes through the thinking ratio.

HALF-STATEMENTS

So, the next step is to find… tell me please, Jack.

If we do something to the numerator, we must…do what, Jill?

Ask about process as often as product; address both "how to solve and "what comes next."

SUPPORT A CLAIM WITH EVIDENCE AND REASONING

Prove it!

- Research
- Argue
- Debate
- Justify
- Critique

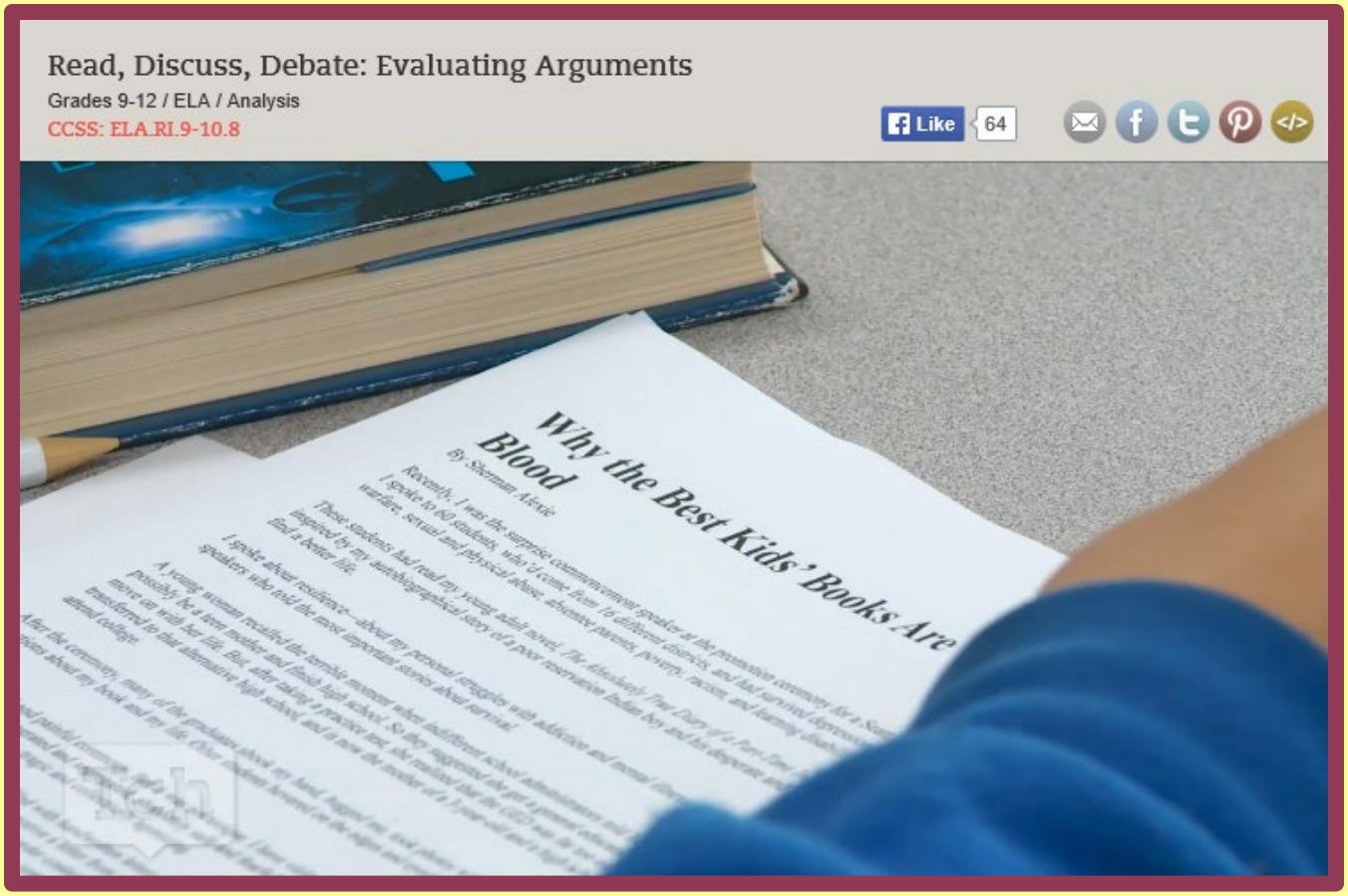


TABLE TALK!

Analyze the ratio in terms of student participation and thinking.

Discuss the questions on the screen.

Noting What I've Learned

Draw It!	Write It!
	Concept: _____ Notes:_____ _____ _____
	Concept: _____ Notes:_____ _____ _____
	Concept: _____ Notes:_____ _____ _____
	Concept: _____ Notes:_____ _____ _____


LUNCH
Hope you enjoy your lunch!
Love,
CMU

It's called **reading**.
It's how people install new software into their brains.

4 CORNERS - GET TO KNOW YOU

CIRCLE: Emotional, Warm, Sensual

TRIANGLE: Intelligent, Verbal, Analytical

SQUARE: Honest, Dependable, Hard Working

Z: Creative, Innovative, Visual

The person doing the talking is the person doing the learning.

Source: Office.com Clip Art

Turn to an elbow partner. The partner with the shortest hair needs to teach the concept to the other partner.
The second partner needs to ask a relevant question.

RECIPROCAL TEACHING

Reciprocal Teaching is providing opportunities for students to take turns assuming the role of the teacher and leading the dialogue (peer to peer). Teach students how to **summarize** text, generate **questions** about text, **clarify** text to further comprehension and use **predictions**.

Students learn to be the "teacher" by helping each other clarify and predict what is in a text and by asking and answering questions of their peers.


Resume
Email Video
Get Link
Students Take Charge

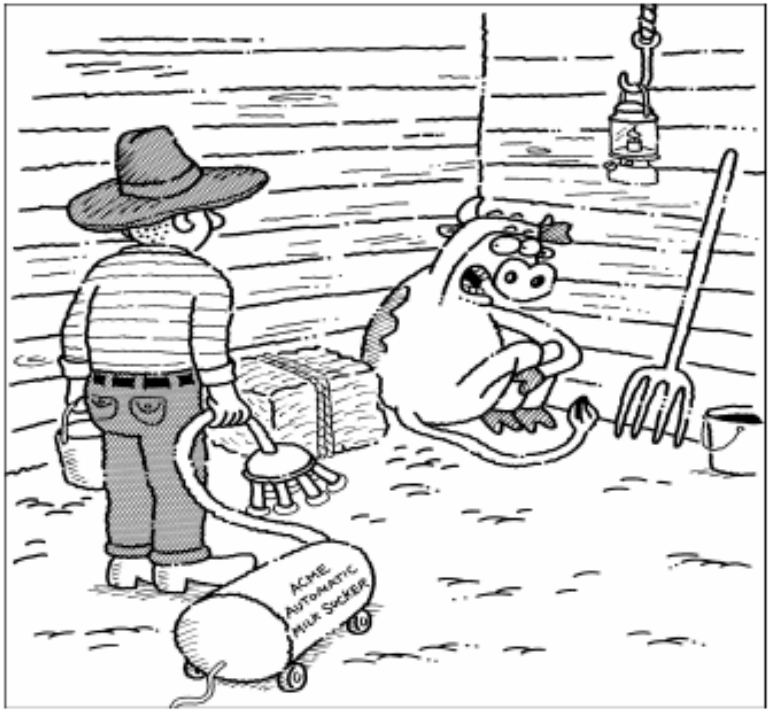
VOCABULARY

How is vocabulary taught in your school?

Face Partners

COWER
(KOW ur) *v.*
to cringe in fear; to shrink away

Link: **COW**



*"Bessie, the **COWERING COW**, never could stand the sight of her own milk."*

Taken from *Vocabulary Cartoons, SAT Word Power*

Source: learning tasks.weebly.com

DID YOU KNOW?

- The number of words students learn varies greatly:
  2 vs. 8 words per **day**
  750 vs. 3,000 per **year**
- In grades 3 through 12, an average student is likely to learn approximately 3,000 new vocabulary words each year, if he or she reads between 500,000 and a million running words of text a school year.
- Between grades 1 and 3, it is expected that economically disadvantaged students' vocabularies increase by about 3,000 words per year, while middle-class students' vocabularies increase by about 5,000 words per year.
- Children's vocabulary size approximately doubles between grades 3 and 7.

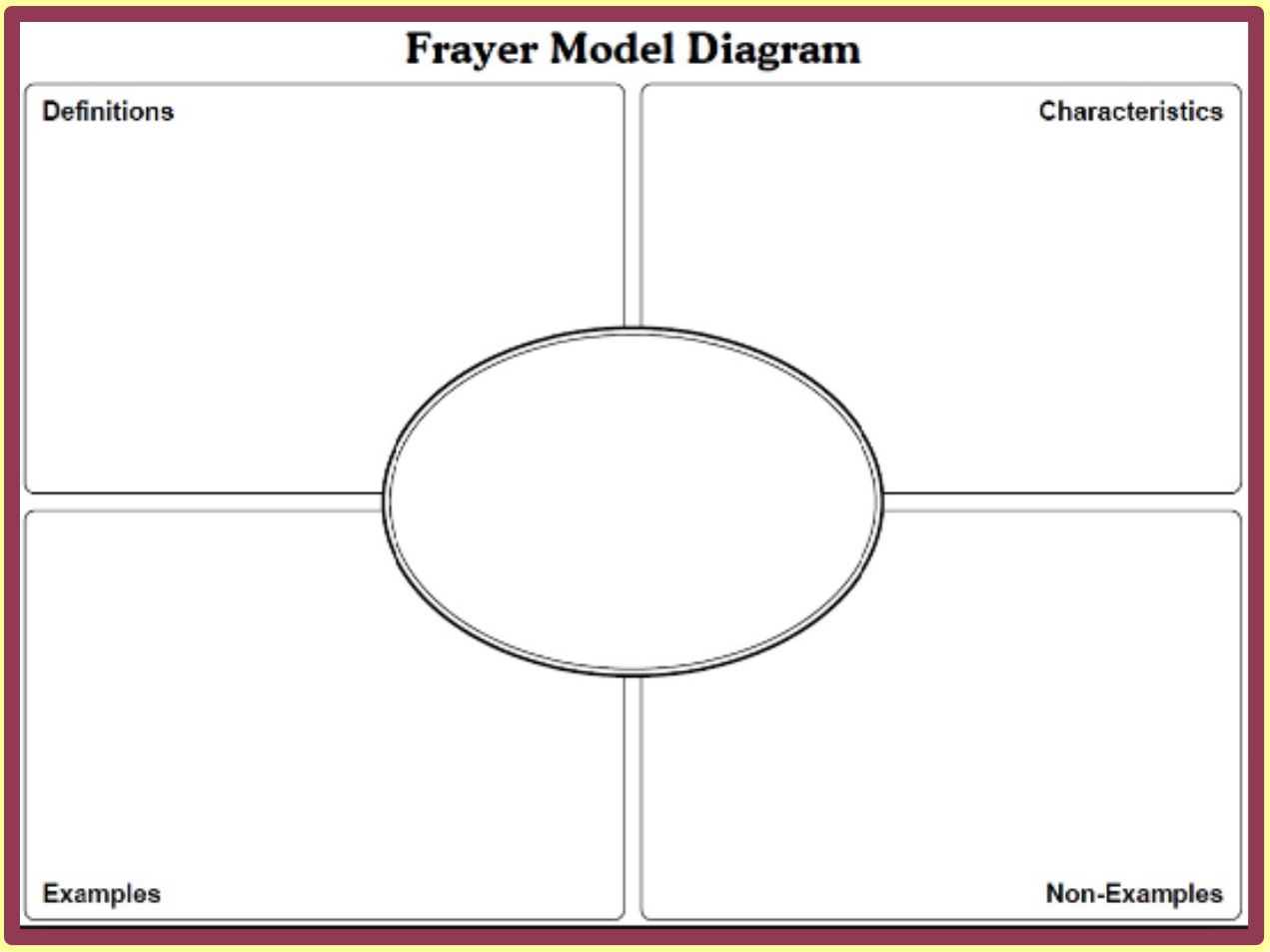
Source: Teaching the Critical Vocabulary of the Common Core: 55 Words That Make or Break Student Understanding by Marilee Sprenger, ASCD 2013

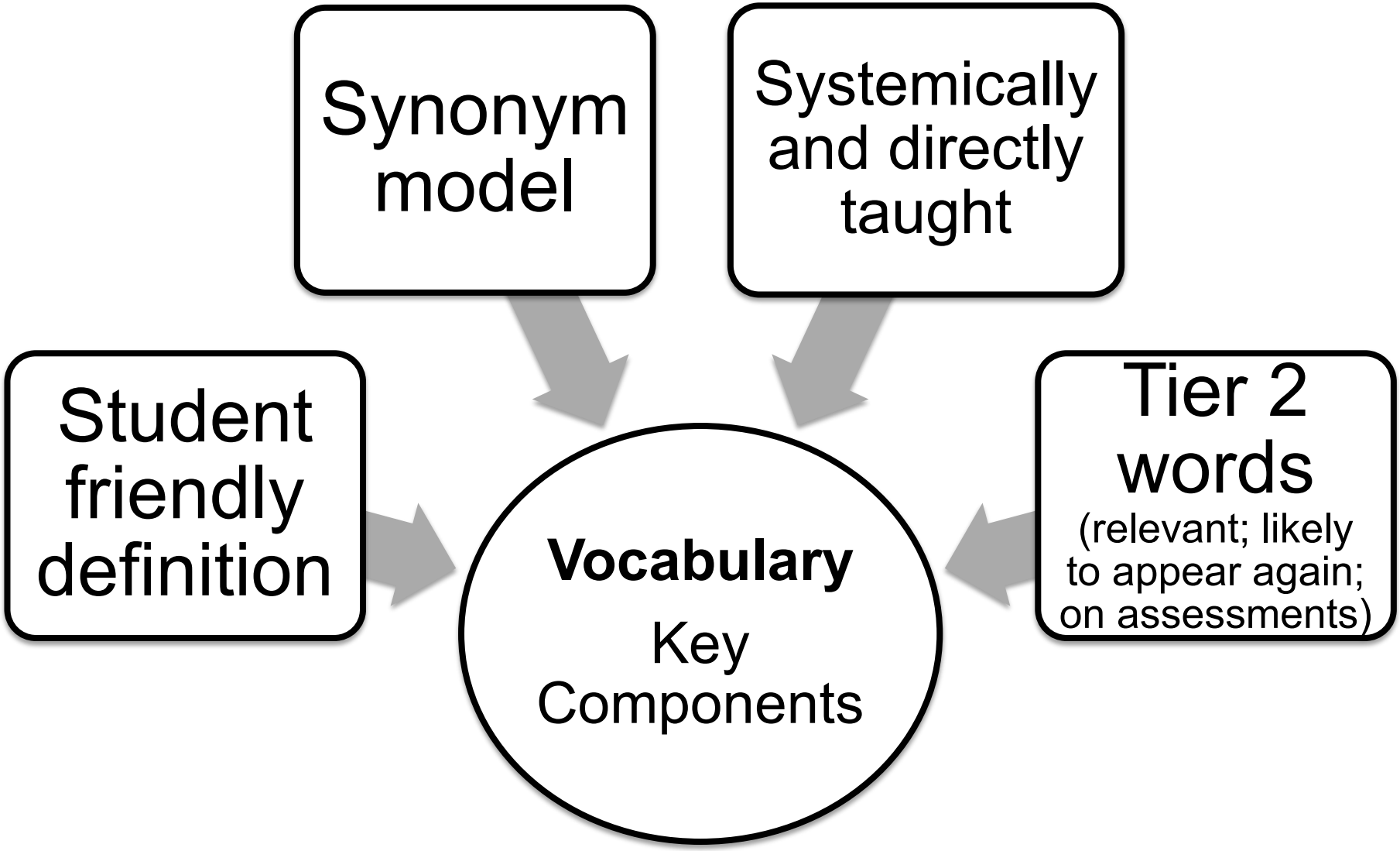
SIX STEPS TO TEACHING VOCAB

Provide a description, explanation, or example of the new term. Hyperbole: an extravagant statement or figure of speech not intended to be taken literally. E.g., "I'd give my right arm for a bite of that cake!"	**Ask students to restate the description, explanation, or example in their own words.**	Ask students to construct a picture, symbol, or graphic representing the term or phrase.
Engage students periodically in activities that help them add to their knowledge of the terms in their notebooks. Idea: Ask student to come up with own examples from what they hear or see on TV or online or from friends	Periodically ask students to discuss the terms with one another. Idea: Elbow partners Clock partners 3 Musketeers A/B partners Table talk	Involve students periodically in games that allow them to play with terms. Idea: Pictionary Pyramid Jeopardy

Source: Adapted from Marzano Research Laboratory 2012

FRAYER MODEL

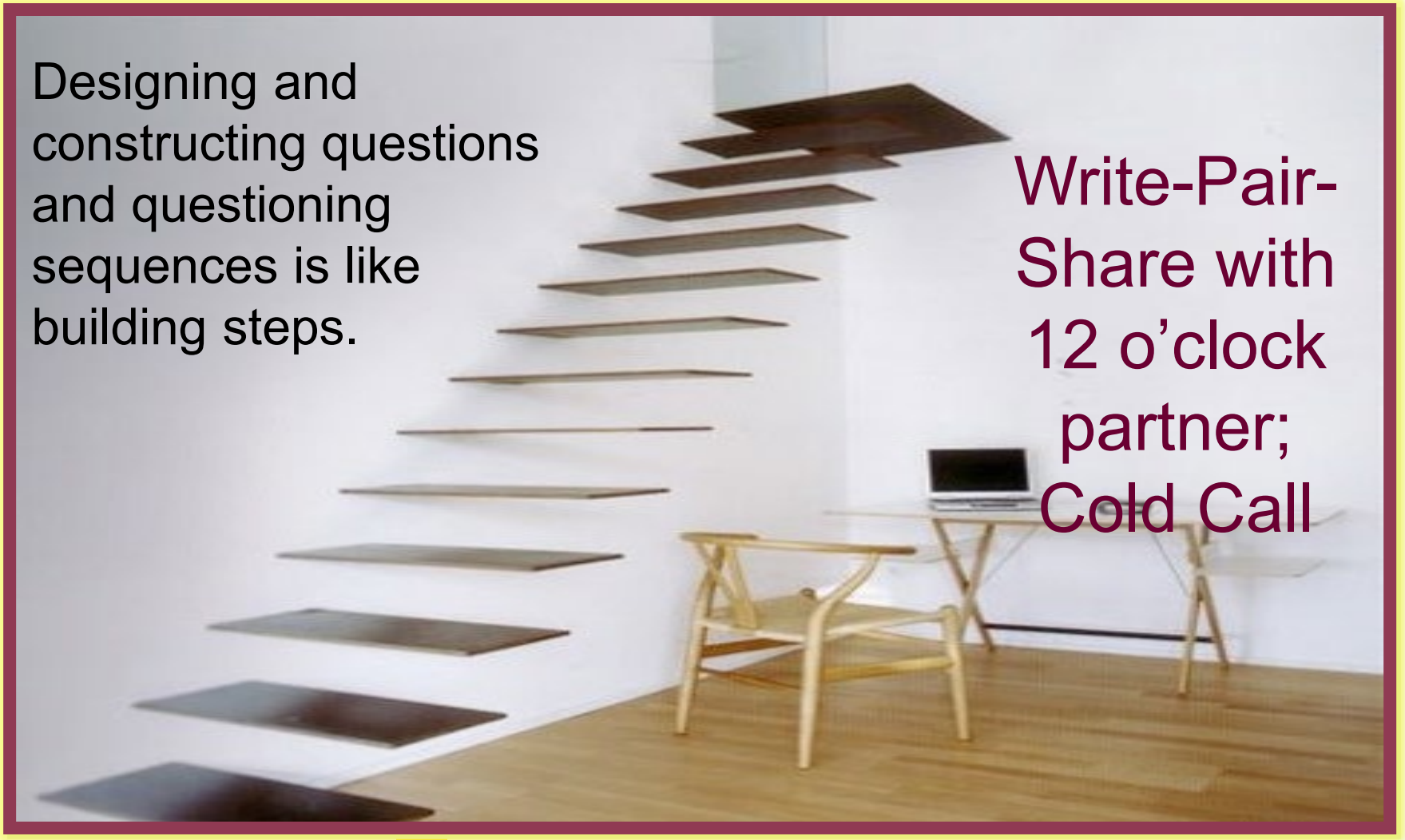



Synonym model
Systemically and directly taught
Student friendly definition
Tier 2 words
(relevant; likely to appear again; on assessments)
Vocabulary
Key Components

"The limits of your language are the limits of your world. All I know is what I have words for."

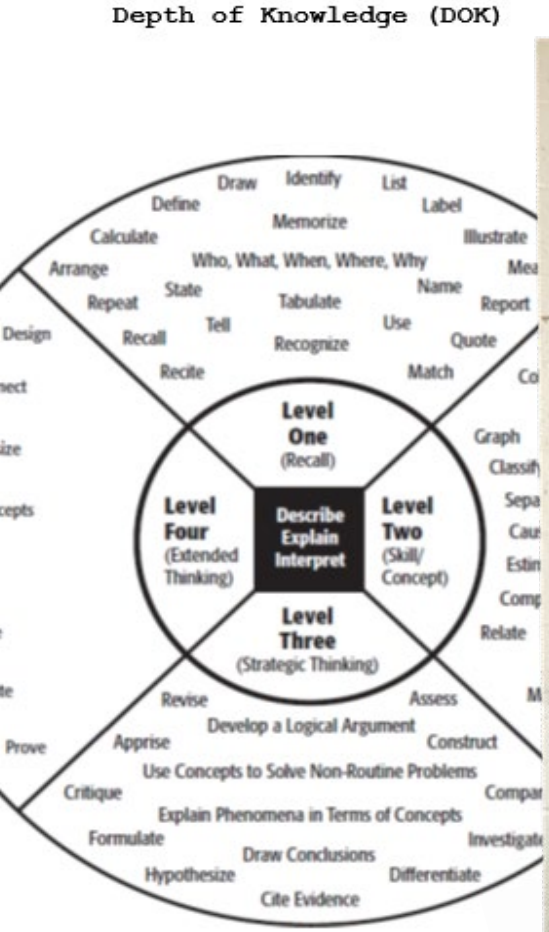
-Ludwig Wittgenstein

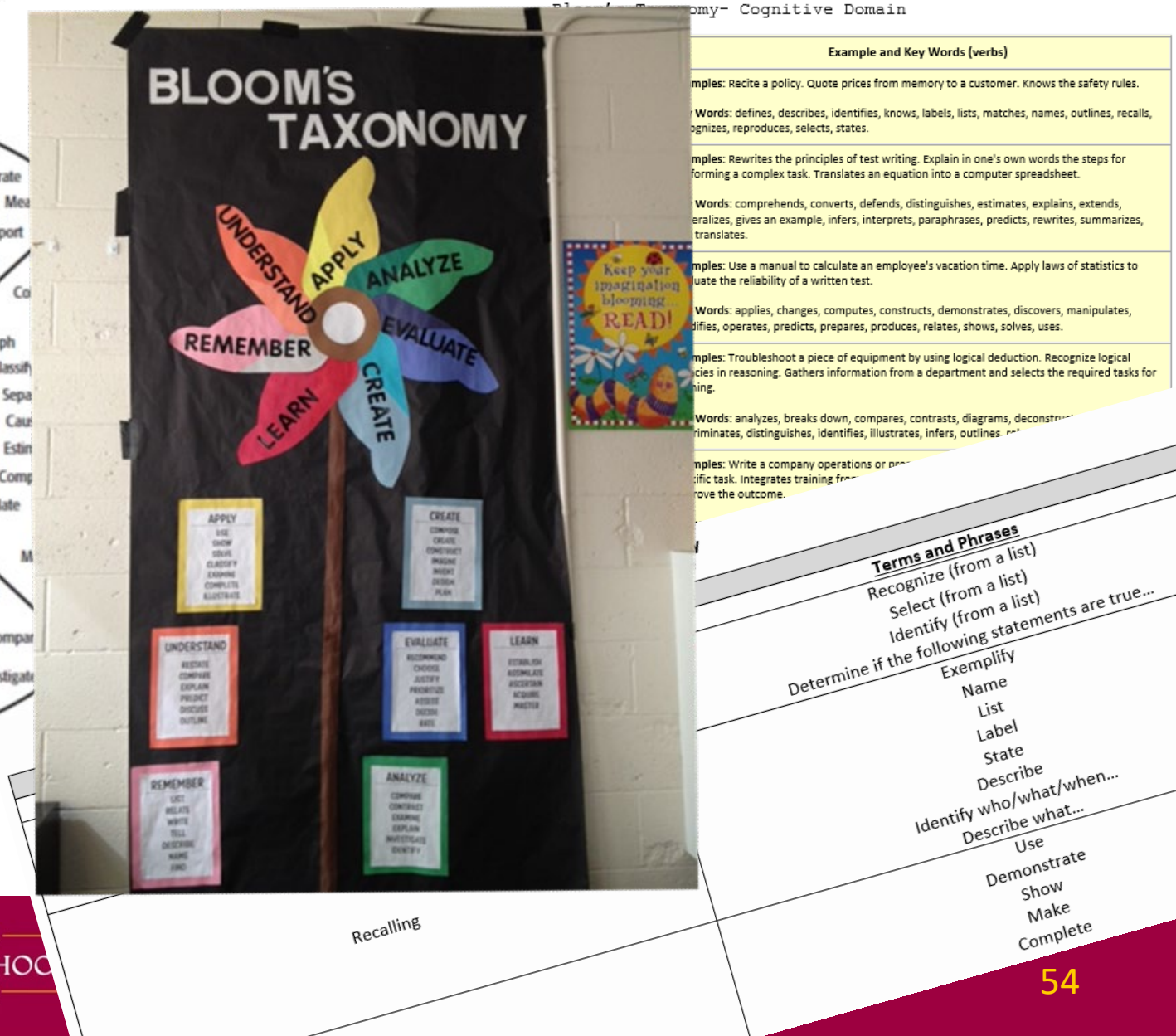
WHY DO WE ASK QUESTIONS?

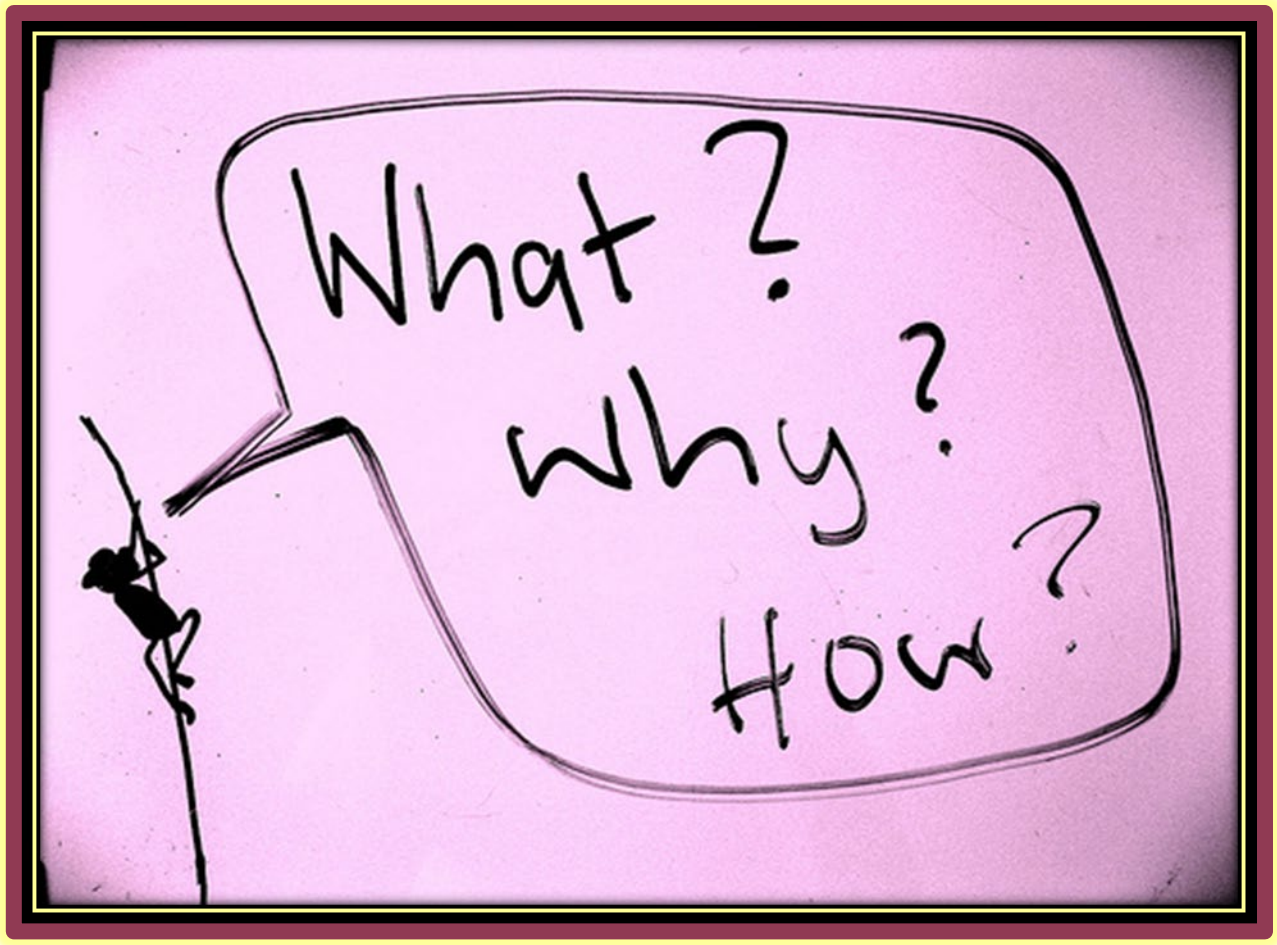


Source: http://kingsombralovesstairs.tumblr.com

BLOOM'S, MARZANO'S, AND DOK







Try: What evidence…; What makes you say that...; What if…

Scholarly Stroll with Dyadic Listening

NO OPT OUT

Question: Why is it important to edit your writing?

IMPLEMENTING NO OPT OUT

- Teacher gives answer, student repeats answer
  - *(To make sure that our message is clear and our spelling, grammar, punctuation, and capitalization are polished.)*
- Another student gives answer, original student repeats it
- Second option: whole class answers, student repeats
- Teacher gives a cue, student answers question
- Another student gives a cue, original student answers question

FIVE PURPOSES OF QUESTIONING

To guide students toward understanding when introducing material

To push students to do a greater share of the thinking (increasing RATIO)

To remediate an error

To stretch students

To check for understanding

HELPING MRS. SMITH, A CASE STUDY

Mrs. Smith is a knowledgeable i… hing experience who is al… grow profession… asses and offe… student …

You obs…

- The stu… get up.
- Mrs. Sm… the room and stays there for the entire … starts the lesson by saying, "Today we are going … notes to learn more about the history of America."
- Mrs. Smith writes notes on the whiteboard and has students copy them exactly as she wrote them into their notebooks.
- When a student asks, "Why do we have to learn this?" she snaps at him and says, "Because it's on the test!"
- Students are quiet and facing forward, completing the task.

Write and discuss the feedback you might offer Mrs. Smith with your 6 o'clock partner.

Noting What I've Learned

Draw It!	Write It!
	Concept: _____ Notes:_____ _____ _____
	Concept: _____ Notes:_____ _____ _____
	Concept: _____ Notes:_____ _____ _____
	Concept: _____ Notes:_____ _____ _____

LET'S STAY CONNECTED

schoology

schoology

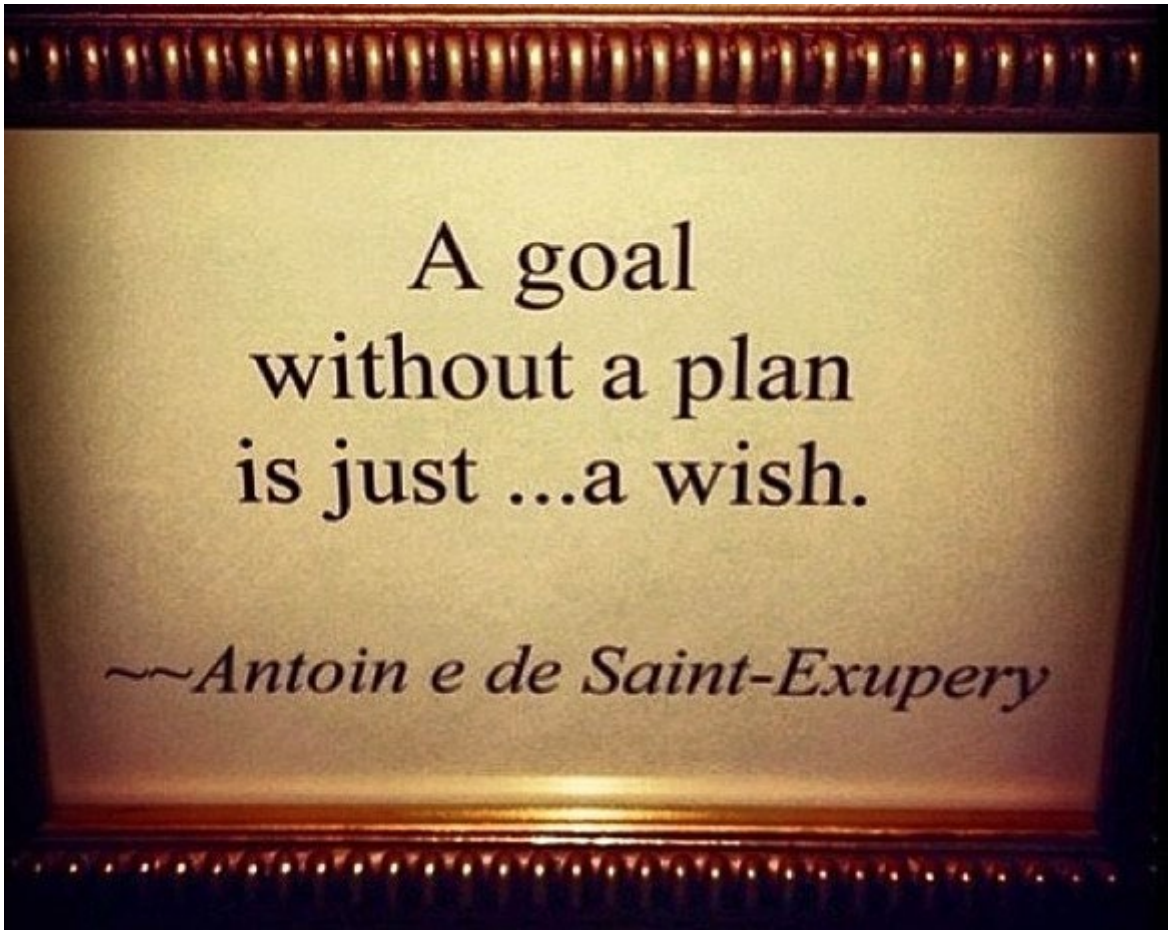
WHIP AROUND

15 Ways To Make Learning More Student-Centered

A Crowdsourced Anthology of Strategies from Real Education Professionals

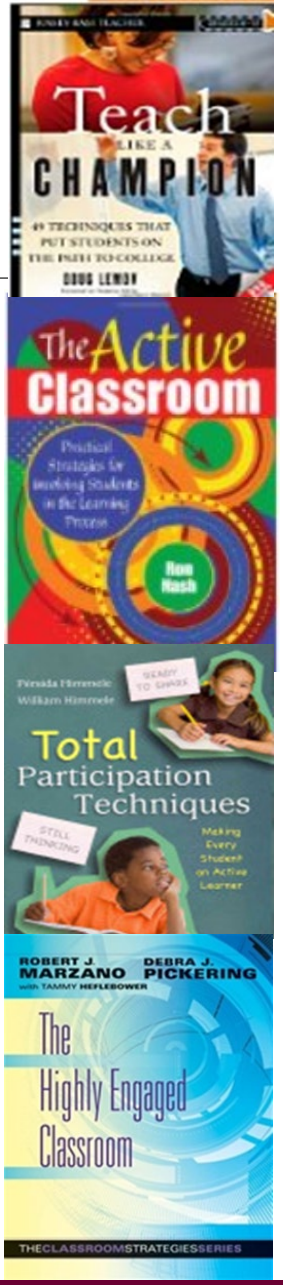
REFLECTION

ACTION PLANNING



RESOURCES

- **Teach Like a Champion** by Doug Lemov
- **The Active Classroom** by Ron Nash
- **Total Participation Techniques** by Persida Himmele and William Himmele
- **The Highly Engaged Classroom** by Robert Marzano and Debra Pickering



TODAY'S OUTCOMES

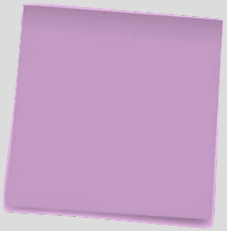
- Analyze the connections between engagement and assessment
- Recognize engagement techniques that increase rigor and cognitive processing
- Identify actionable techniques that will increase student engagement
- Develop an action plan to increase active learning in your building

FEEDBACK PLEASE - Survey and Sticky Notes

Plus

What worked well for you today?
What did you really like?

Delta

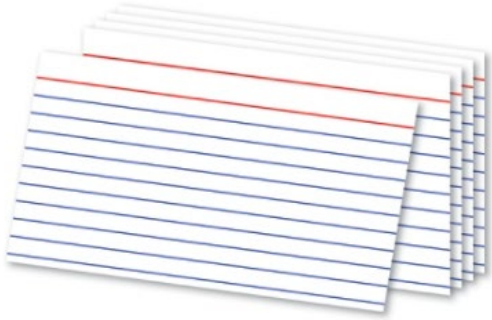


What changes would you recommend for today?
What didn't you like?

Content adapted: Data Wise Leadership Institute

COMMITMENT TO ACTION

On an index card, write the following:



1. Your name and school name.
2. Your email and/or phone number.
3. Two ideas you plan to implement within 30 days of today.

Now, find a person with whom to switch cards.
This is your accountability partner!

CONTACT INFO/QUESTIONS

Valerie Bailey
School Performance Manager
616-498-9202
vbailey@thecenterforcharters.org

Check Schoology for a copy of the presentation and other materials!

"Rarely do we find men who willingly engage in hard, solid thinking. There is an almost universal quest for easy answers and half-baked solutions. Nothing pains some people more than having to think."

–Dr. Martin Luther King, Jr.