# The Power of Thinking Outside the Box to Meet the Diverse Needs of School Communities

# Aspiring School Leaders Regional Education Conference 2017

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- Engage in research-based instructional strategies to include all students
- Understand the significance for using research-based strategies in teaching and instruction
- Learn how to implement research-based instructional strategies

# **Objectives**

• Directions: In the following line of letters, cross out six letters to that the remaining letters – without altering their sequence – spell a familiar English word.

#### BSRIAXLEITNTERS

Hint: If you're having difficulty, go back and read the directions very carefully again.

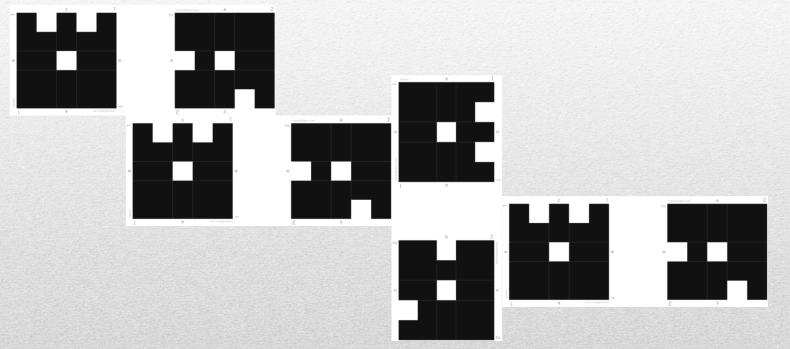
# Turn on your brain...

#### BSRIAXLEITNTERS

...BRAIN

## Answer





# Plickers Assessment



• Christopher Edmin: Teach teachers how to create magic



# Teach Teachers how to create magic



Story Time: setting the stage

A classroom with a variety of student needs....

- gifted and talented
- students with specific learning needs
- Students on IEPs
- Students from a variety of cultural backgrounds
- Students from a variety of socioeconomic backgrounds

#### What diverse needs are we facing?

- Connor likes coming to school because people don't yell all the time no one hits at school either, and if they do, they get in trouble
- Katie knows she doesn't learn like other kids. She has an aide who helps her in class. She doesn't like feeling different.
- Timmy hates reading. He misbehaves sometimes

   not that he wants to, but because he doesn't
   want to appear 'stupid' in front of everyone.

### For example...

- Emma reads her mom's novels at home. She likes to write short stories in her free time. At school she's working well above grade level.
- Keh Keh is a refugee from Burma. She has an ELL tutor and is learning English but she has difficulty understanding the teacher and is uncomfortable asking questions.
- Petra enjoys learning and wants to participate in classroom discussions but he doesn't. His friends say school is not for kids like them. Learning is for other kids, so why should he bother. He'll never go to college anyways.
   For example...

Strengths	Challenges			
Superior Vocabulary	Easily frustrated			
Highly creative	Stubborn			
Resourceful	Manipulative			
Curious	Opinionated			
Imaginative	Argumentative			
Questioning	Difficulty with written expression			
Problem-solving ability	Highly sensitive to criticism			
Sophisticated sense of humor	Inconsistent academic performance			
Wide range of interests	Lack of organization and study skills			

#### Student Characteristics in a mixed-ability classroom

Difficulty with social interactions

Language barriers

Advanced ideas & opinions

Special talent or consuming interest

- Learners must make meaning of what teachers seek to teach (National Research Council, 1999)
- Learning takes place most effectively in classrooms where knowledge is clearly and powerfully organized (National Research Council, 1999)
- Learners are actively engaged in the learning process (Wiggins & McTighe, 2005)
- Learners need to feel a sense of safety and connection (Wiggins & McTighe, 2005)

### **Principles of learning**



How are we going to get students with diverse needs engaged?



- Use preferential seating
- Provide organizational techniques
- Teach compensation strategies
- Use technology



# Commonly suggested strategies



- Practical, research-based instructional strategies
- Based on principles of universal design for learning
- Support and enhance all student's academic success
- Research indicates that content instruction paired with specific learning strategies improves learning for all students

Introducing...



• Question That



# **Question That**



# To stretch thinking: Add a criterion (3,2,1)

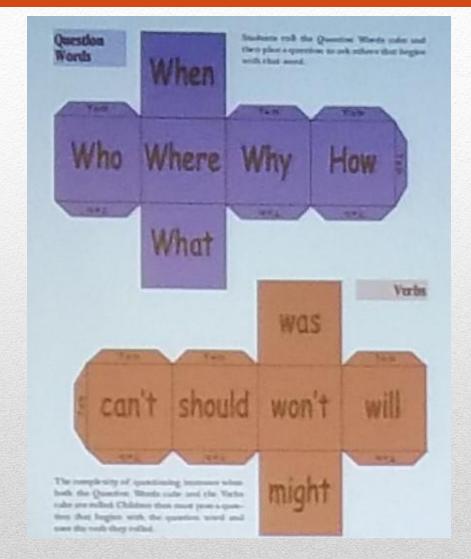
3 Things I notice, 2 Things I infer, 1 Question

Analysis Grid  Tomo English punctuation ecrors  Cooe Asalways Nanever  Sasometimes  Find ten errors in this punctuation grid.	Ends a sentence	Begins a sentence	Middle of sentence	In bibliographies	Used in a number	Used with names	Used in addresses	Used in quotations	In abbreviations	
*	A	N	N	A	5	5	5	5	A	
>	N	N	5	A	5	N	5	5	N	
-	N	N	S	5	5	5	N	5	N	
I	s	N	N	N	N	N	N	5	N	
?	5	7	N	5	N	N	N	5	N	
	5	5	s	N	N	N	N	A	N	
()	5	5	5	A	N	5	N	N	N	
100	s	N	S	5	N	N	N	5	N	

Kingore, B. (2006). Teaching Without Noncerns: Translating Research into Effective Practice, 2nd ed.
Austin, TX: Professional Associates Publishing.

# Analysis Grid: Find the Flaw

**Question Cubes** 



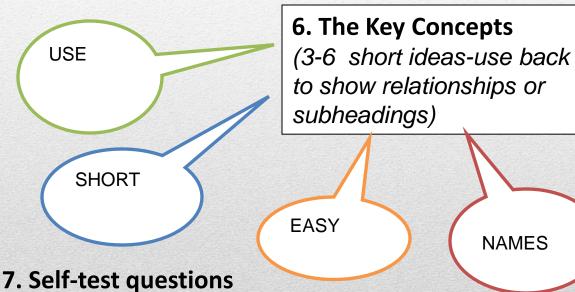
#### **Low Prep High Impact Differentiation**

Date:

- **3. Last Unit:** *(review last* unit/lesson)
- 1. Current Unit: (introduce using title)
- **4. Next Unit**: (show how unit/lesson leads to next)

5. Big question:

(Discuss why this unit/lesson is important and relevant)



2. What is this about?

(Discuss with Students)

**NAMES** 

**COLORS** 

8. Unit Schedule

(Describe what should students be able to do after studying this unit)

(Describe key activities and timelines)



Share & debrief



# **Spelling: Color Coded Cards**

Mnemonics: good for remembering facts or events

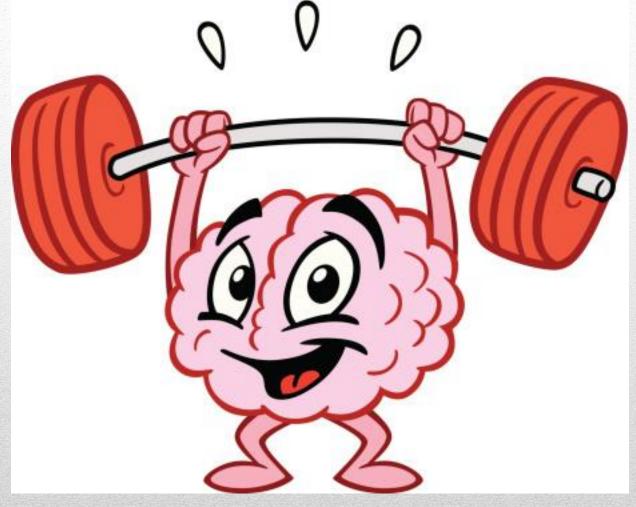
Connects new learning to prior knowledge through the use of visual cues

- HOMES" to remember Great Lakes, Huron, Ontario, Michigan, Erie, and Superior
- PEMDAS to remember the order of operations: parentheses, exponents, multiply, divide, add, subtract When mnemonics are used correctly, they can streamline the learning process, giving students access to broad amounts of information. Because they learn "bridges" to other information, less working memory is required.

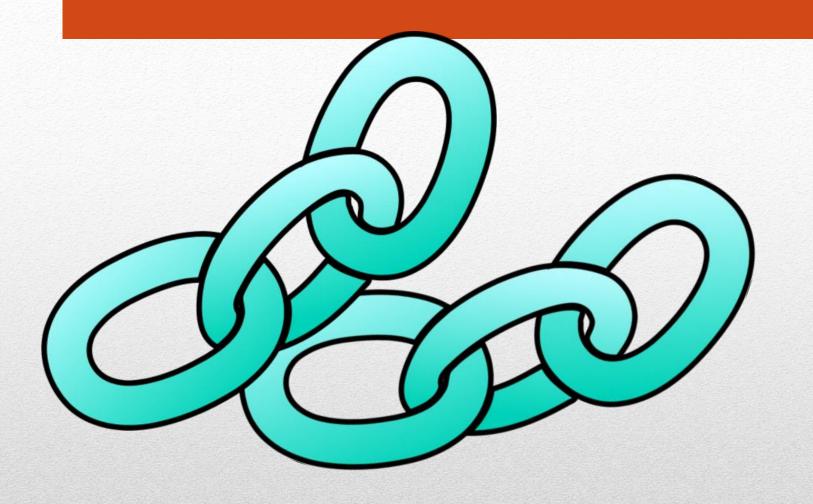
# **Key word Mnemonics**

- 1. supports in-depth thinking
- 2. less frustrated students
- 3. students are engaged
- 4. fewer students feeling distracted by other students
- 5. promotes student achievement without extensive individual interventions

# How these techniques help you as a teacher



Brain Break



# The LINCing Routine

- To help a diverse group of students learn and remember the meaning of important terms.
  - Gets students ready to learn new terms
  - Co-construct visual and auditory memory devices
  - Check student understanding

## Purpose of the LINCing Routine

- Extensively researched
- Promotes understanding and recall of an important vocabulary term
- Highly effective with ALL students
  - When consistently used with students for 3 weeks, students w/LD increased vocabulary scores 24%-29%
  - Students without LD increased vocabulary scores 16% –
     19%
- Most effective with middle school high school age students, can be used effectively with upper elementary

#### What the Research says about the LINCing Routine

1. Term

Discount

3. Reminding Term

Disc

4. Story

I saved three dollars on a disk



2. Definition
The
difference
between
the list
price and
sale price

### **Mnemonics using LINCing Routine**

Step 1. The term: discuss and define the meaning of the word within the context of the lesson. Record the term on the form.

1. Term

**Discount** 

### **Mnemonics using LINCing Routine**

Step 2. A brief definition is written in section 2. Use ONLY the parts of the definition that are most essential for students to know. (reduce long definitions to their most essential parts)

1. Term

**Discount** 

2. Definition

The difference between the list price and sale price

#### **Mnemonics using the LINCing Routine**

Step 3 The reminding word gives students auditory clues that will enable the to access their memory of the new term and the new term's definition. It must SOUND similar to part of all of the new term, and it must be a real word whose meaning is very familiar to the students. It should help you remember what the new word means.

1. Term

**Discount** 

3. Reminding Word

Disc

2. Definition

The difference between the list price and sale price

### **Mnemonics using LINCing Routine**

Step 4 The LINCing story is a short phrase or sentence that enables students to connect or link the meaning of the new term to familiar background knowledge.

- It provides auditory and visual links between the reminding word and the meaning of the new term.
- AN EFFECTIVE story includes several characteristics:
  - the story always contains the reminding word, the story always contains the meaning of the new term in some way, the story is always short and simple.

1. Term

**Discount** 

3. Reminding word

Disc

4. The LINCing story

I saved three dollars on a disc

2. Definition

The
difference
between the
list price
and sale
price

#### **Mnemonics using LINCing Routine**

**Decree:** to make a decision and force it on others.

Reminding word: Decide

**LINCing Story:** "the dictator decided to force everyone to pay higher taxes." (The story helps you think of a decision being forced on others.)

**Flourite:** a purple mineral used to make steel hard.

**Reminding word:** Floor

**LINKing Story:** "My knee turned purple when it hit the hard, steel floor." (Story helps you think of steel and the color purple.)

**Decree:** to make a decision and force it on others.

Reminding word: Decide

**LINCing Story:** "He decided to go to town."

(Story does not help you think of forcing a decision on others.)

Flourite: a purple mineral used to make steel hard.

**Reminding word:** Floor

LINKing Story: "The floor was

messy."

(Story does not help you think of steel or the color purple.)

## **Examples and Nonexamples**

Step 5 The LINCing picture provides a visual memory link for the new term.

- The picture does not need to be sophisticated artwork stick figures are fine.
- The linking pictures must include 3 characteristics: It MUST depict: a part related to the Reminding word, contains parts related to the important ideas in the definition, and it must help the student remember the new term's definition.

1. Term

**Discount** 

3. Reminding word

Disc

4. The LINCing story

I saved three dollars on a disc



2. Definition

The difference between the list price and sale price

Best Better Poor LINCing Picture LINCing Picture LINCing Picture

## **An Effective LINCing Picture**

5. Picture 2. Definition 4. Story 1. Term compromise 3. Reminding Term

**Group practice: Term 'compromise'** 

#### USE the Mnemnic to practice the Routine

- List the parts
- Identify a Reminding word
- Note a LINCing story
- Create a LINCing picture

#### **Mnemonics using LINCing Routine**



# Time to practice

Amendment Serpentine Clamor

Charitable Countenance Tremulous

Mortified Grotesque Allude

Tirade Exquisite Placid

Perpetual Melancholy Amiable

Wholesale Incredulous Venerate

Abolitionist Perplex Undulate

## **Word Choices**



# **Share & Discuss**

# Why would this instructional strategy engage all students?



- Strategies
  - Question That
  - 3,2,1
  - Analysis Grid
  - Cube Questions
  - Graphic Organizers color coded
  - Color coded spelling words
  - Mnemonics

# Wrap Up

- http://www.livebinders.com/play/play?id=2163392
   Instructional Strategies for Mixed Ability Classrooms
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## **More information**

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