
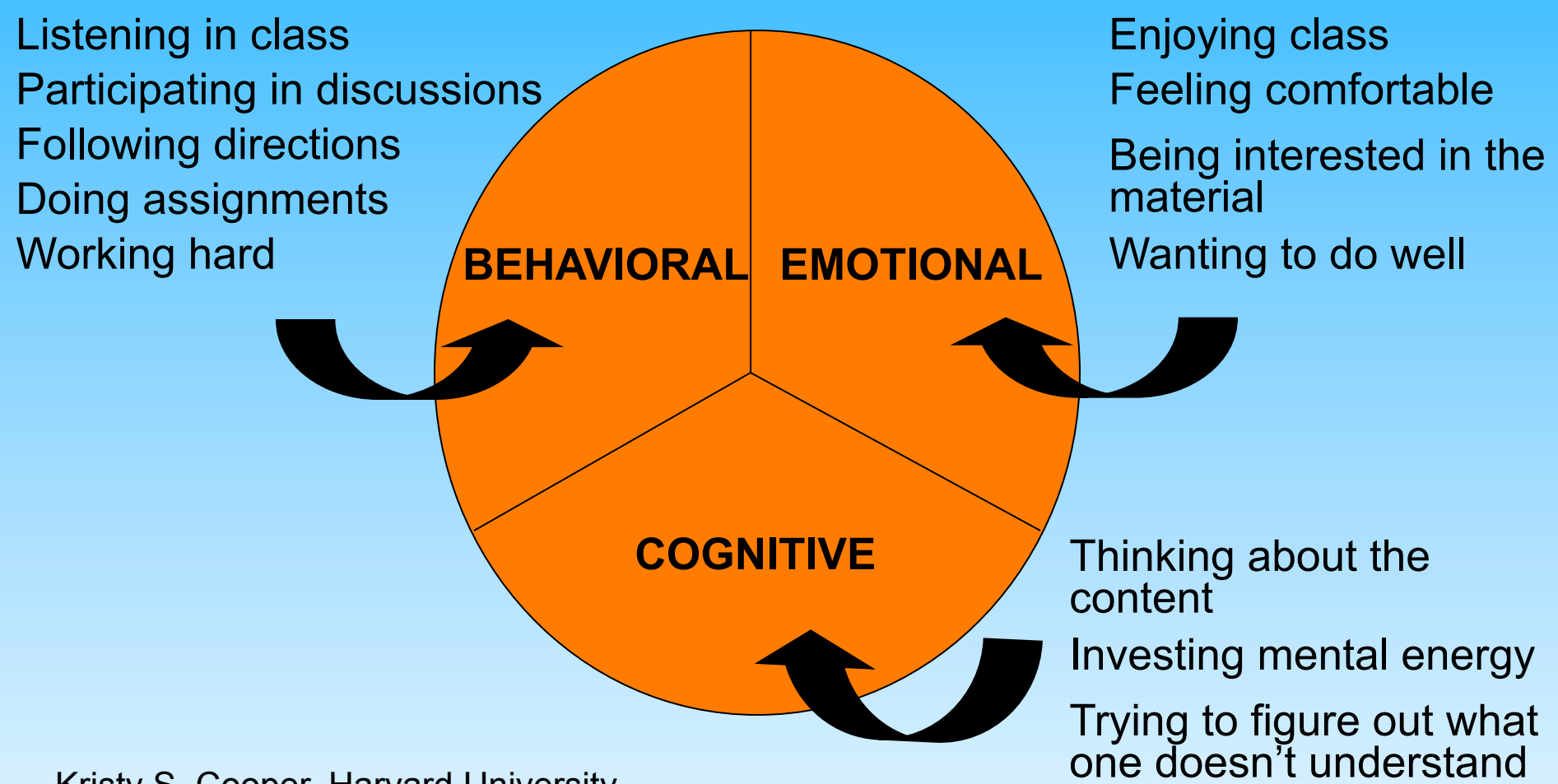




Student Engagement

- 
- What do you THINK you know about student engagement?
 - What questions or PUZZLES do you have about student engagement?
 - How might we EXPLORE the puzzles we have around student engagement?

Dimensions of Student Engagement



What would it take students to..

share
their
ideas?

think
deeply?

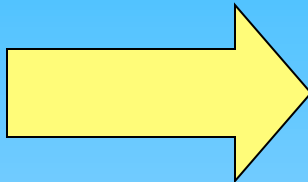
be willing to
make
mistakes?

take a
risk?



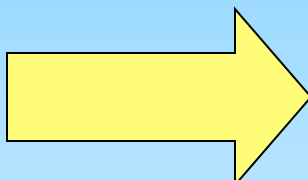
Dr. Marzano's Four Questions

- How do I feel?
- Am I interested?



ATTENTION

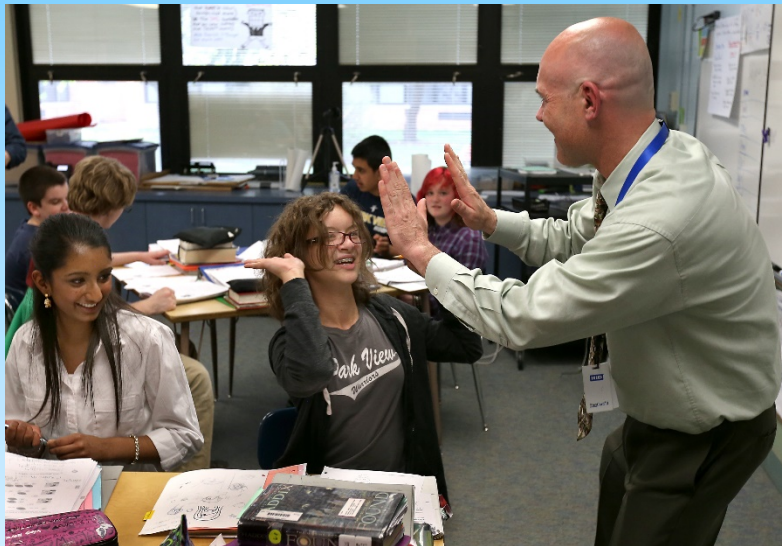
- Is this important?
- Can I do this?



ENGAGEMENT

How Do I Feel?

- Effective **pacing**
- Demonstrating **intensity & enthusiasm**



- Building **positive relationships**
- Using **humor**
- Physical **movement**




Movement

- “Amazingly, the part of the brain that processes movement is the same part of the brain that processes learning.” (Eric Jensen, *Teaching With the Brain in Mind*)
- “While sitting, you are more likely to get bored and lose focus. But while standing and listening to another, if it’s just for a few moments, your focus is stronger.” (Eric Jensen, *The Learning Brain*)


Approximate Attention Spans

For pre-adolescents:



Alter instruction
approx. every
5 – 10 minutes

For adolescents
into adults:



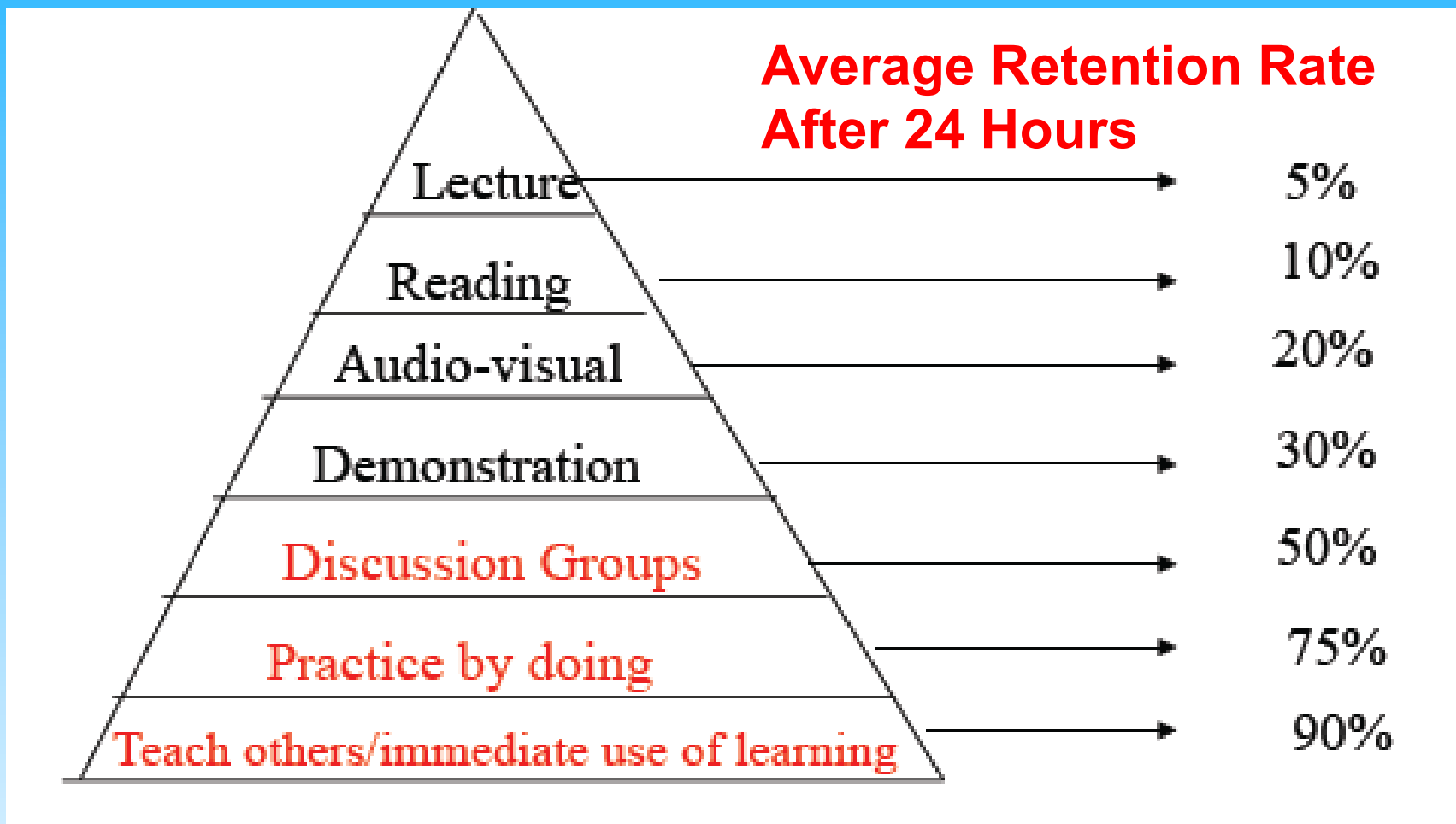
Alter instruction
approx. every
10 – 20 minutes

Am I interested?

- Using **game-like activities**
- Initiating friendly **controversy**
- Introducing **unusual information**
- Using effective **questioning** strategies



Boosting Retention





Is This Important?

- Connecting to **students' lives**
- Connecting to students' life **ambitions**
- Encouraging **application** of knowledge

Relevance

Can I do this?

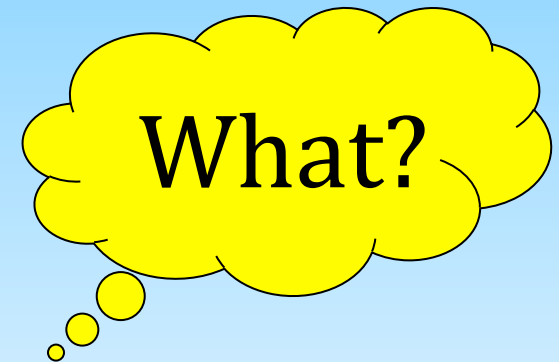
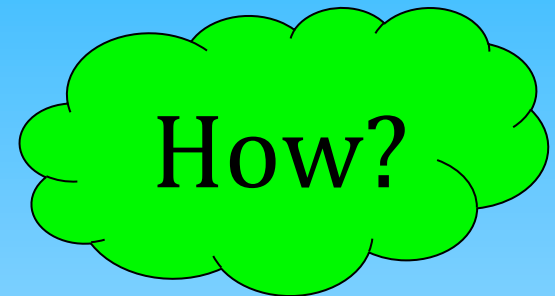
- Tracking and studying **progress**
- Using **effective verbal feedback**
- Providing **examples** of self-efficacy
- Teaching **self-efficacy**



Mindsets

Fixed Mindset	Growth Mindset
Intelligence is a fixed trait; talents are carved in stone	Intelligence is malleable quality, a potential that can be developed
Goals (Students Say)	Goals (Students Say)
Looking smart is most important	Learning is most important
Effort Beliefs (Students Say)	Effort Beliefs (Students Say)
<p>"The main thing I want when I do my school work is to look smart."</p> <p>"I would try to cheat on the next test."</p> <p>"School work makes me feel like I'm not very smart."</p>	<p>"It's much more important to learn things in my class than to get the best grade."</p> <p>"I would spend more time studying for the tests."</p> <p>"The more you work at something, the better you'll be at it."</p>

What are they thinking? What's under the hood?



Ron Ritchhart • Mark Church • Karin Morrison

FOREWORD BY DAVID PERKINS



MAKING THINKING VISIBLE

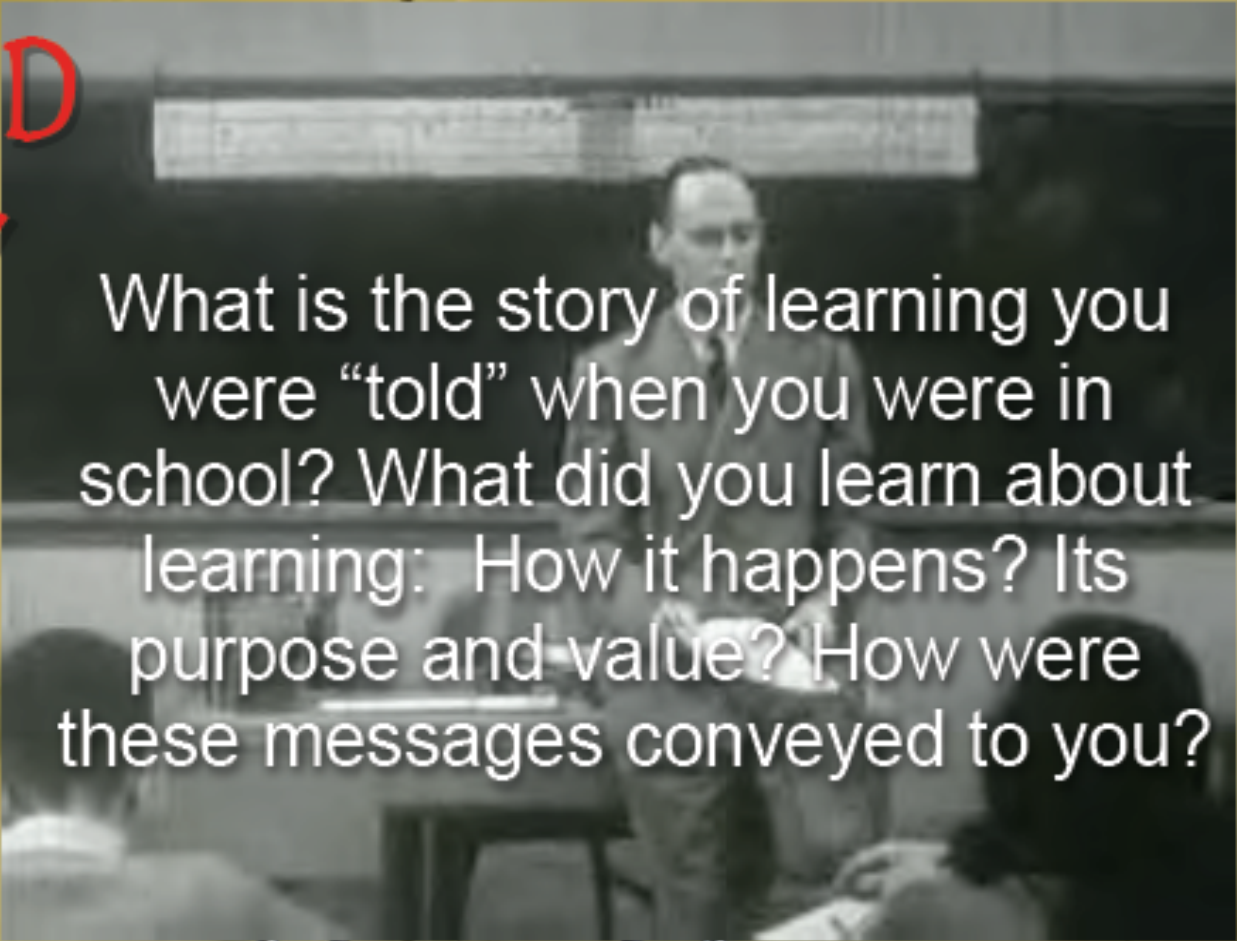
How to Promote
Engagement, Understanding, and
Independence for All Learners



What do we want the children we teach to
be like when they
are adults?



THE OLD STORY

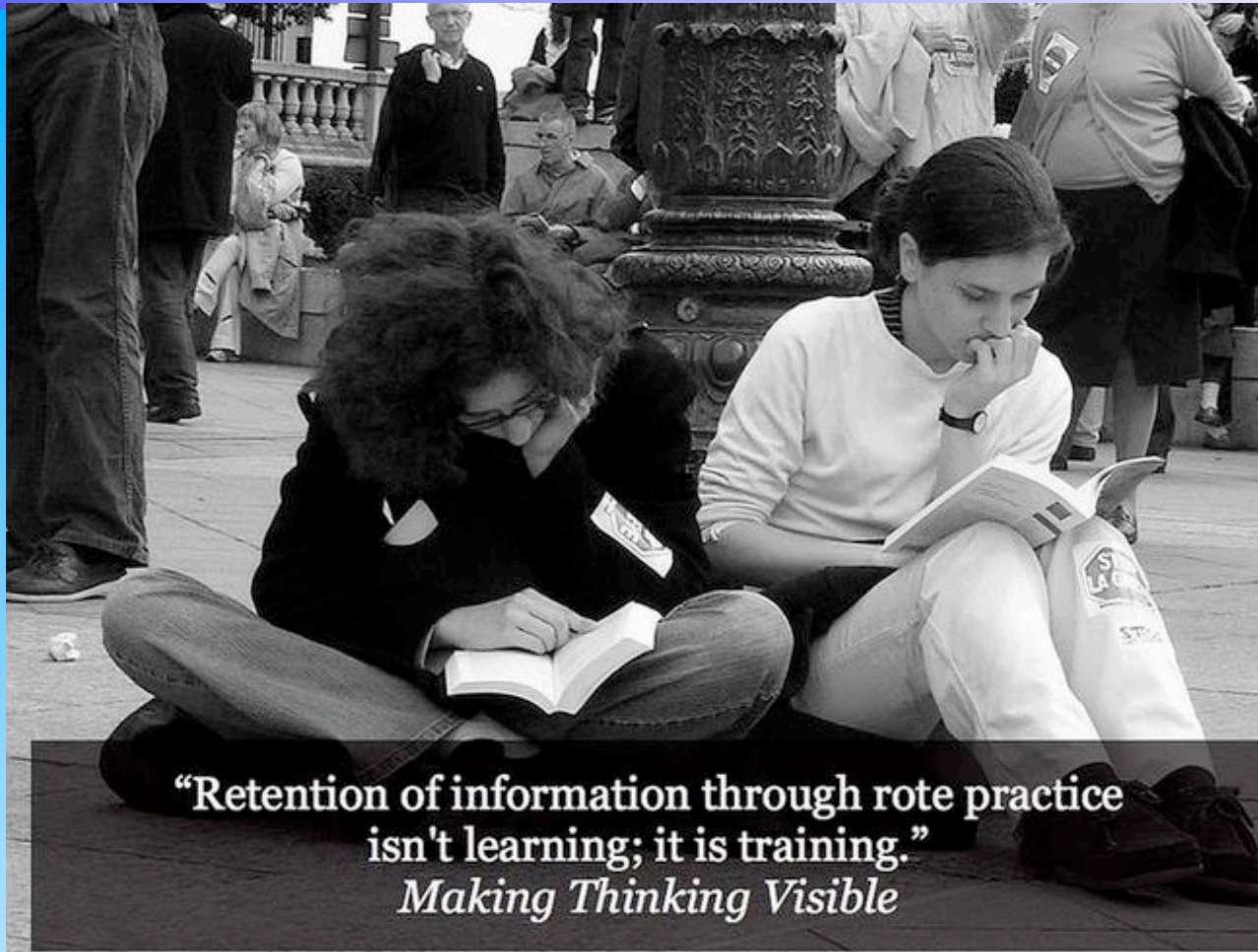


What is the story of learning you were “told” when you were in school? What did you learn about learning: How it happens? Its purpose and value? How were these messages conveyed to you?



A Story of Work

- The goal of school is the completion of work done for someone else.
- The larger purpose behind activities isn't always clear. Thus, assignments become ends in themselves.
- Grades are the pay off/outcome for work.
- Doing school work is seen as the students' job.
- Good students do the work they are assigned without question.



“Retention of information through rote practice
isn't learning; it is training.”
Making Thinking Visible

Thinking – Our goal is to understand

Go beyond memorization, busy work, activities!



A Story of Alienation

- School isn't about me, my life, my culture.
- School isn't about learning, it's about having the answers.
- Some people are just smart and know how to do it, others (like me) can never get it.
- Rewards go to those who can guess what the teacher wants.
- You study by memorizing.
- Smart means being fast with the answer.

A Shift in The Story of School

WORK




LEARNING





Beginnings of a NEW Story

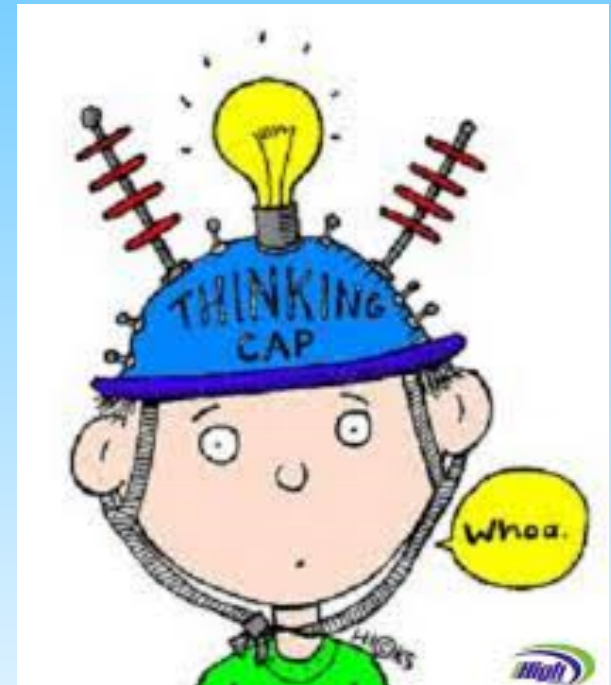
- Learning is
 - a consequence of thinking.
 - often provisional and frequently changes with time.
 - an active process and involves getting personally involved.
- Learning and thinking are as much a collective enterprise as they are an individual endeavor.
- Learning involves uncovering complexity and delving deeply.
- Questions not only drive learning but also are outcomes of learning.



“Learning is a consequence of thinking. Retention, understanding, and the active use of knowledge can be brought about only by learning experiences in which learners think about and think with what they are learning...Far from thinking coming after knowledge, knowledge comes on the coattails of thinking.” (David Perkins, *Smart Schools*)

What are Thinking Routines?

- Tools used to support thinking
- Structures and scaffolds to build and extend thinking
- Patterns of behavior





Thinking Routines

- Goal oriented; used for a specific purpose of directing or scaffolding thinking
- Can be used across grade levels and content areas
- Encourage active engagement with a topic
- Advance understanding and provide ways to make thinking visible to students, their peers and the teacher



How Can We Make Thinking Visible?

- Questioning
- Listening
- Documentation Practices

http://www.youtube.com/watch?v=ZqYIFoizPIM&list=PL7YSC59DmUiem4_1zQOAYhYT1mVrw6tD&index=3



Routines – GISD Focus

Introducing & Exploring Ideas

- Think-Puzzle-Explore
- The Explanation Game
- Chalk Talk

Synthesizing & Organizing Ideas

- Headlines
- I Used to Think..., Now I Think

Digging Deeper

- What Makes You Say That?
- Sentence-Phrase-Word



Introducing & Exploring Ideas

Think-Puzzle-Explore
Page 71-77

Think-Puzzle-Explore

A handwritten worksheet on a yellow background, titled 'Allergies' in a decorative bracket at the top center. The worksheet is divided into three columns by vertical lines, each with a header: 'Think' on the left, 'Puzzle' in the middle, and 'Explore' on the right. Each column contains a list of bullet points. The 'Think' column lists various symptoms and observations related to allergies. The 'Puzzle' column lists questions about the causes and effects of allergies. The 'Explore' column lists activities for further investigation. The worksheet is secured with two small blue binder rings, one on the left and one on the right.

Allergies

Think	Puzzle	Explore
<ul style="list-style-type: none">• eat healthy food• when you have an allergy you rest• nuts/fruit allergy (eggs) - <u>food</u>• soup makes you feel better• wear warm clothes• you don't go outside• makes you sick• Milk causes allergies• get lots of rest	<ul style="list-style-type: none">• How do allergies make you feel?• Where do allergies come from?• How can allergies make you sick?• Does food make allergies better?	<ul style="list-style-type: none">• Think about questions• Read a book.• Ask a scientist.• Ask a doctor.• Go on the internet.• Watch a movie.



Introducing & Exploring Ideas

The Explanation Game
(Pages 101 – 108)



Introducing & Exploring Ideas

Chalk Talk (Pages 78 – 83)

Demonstration for Chalk Talk (2nd grade classroom)

<http://www.youtube.com/watch?v=H8zIJgSqvA0>

(From 8th grade PE classroom)

<https://vimeo.com/94830880>

Chalk Talk





Synthesizing & Organizing Ideas

Headlines (Pages 111 – 118)

Demonstration of Headlines

<http://www.youtube.com/watch?v=rMginVgsYPs>

Headlines





Synthesizing & Organizing Ideas

I Used to Think..., Now I Think
(Pages 154 – 161)

I Used to Think..., Now I Think

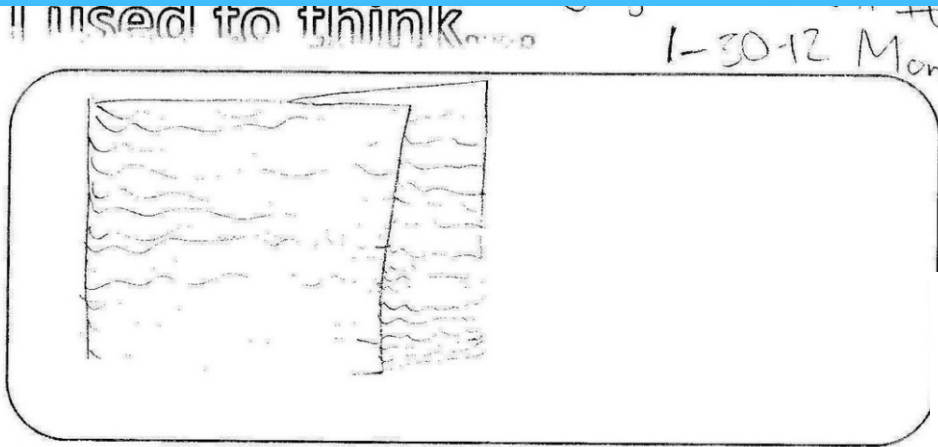
I used to think...

- That spiders had 6 legs
- That spiders didn't have enemies
- That spiders have 6 or 8 eyes
- That spiders had special feet that can climb the web

And now I know...

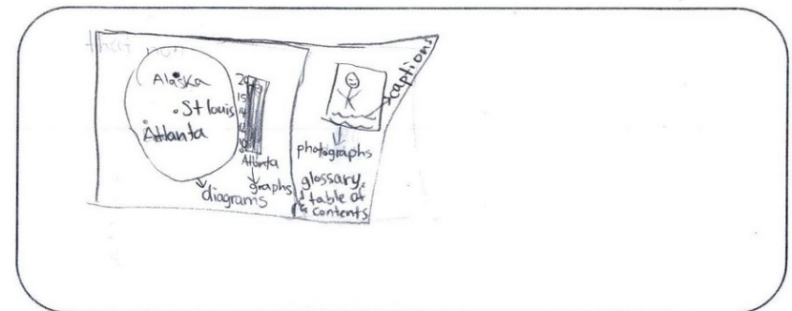
- That spiders have 8 legs!
- That birds, wasps and other spiders are enemies
- That spiders can have 8, 6, 4, 2, 1 or 0. Wow!
- That spiders have oily legs so they don't stick

I Used to Think..., Now I Think



that nonfiction was just full of facts. I used to open nonfiction books and see all that writing. It looked like so much facts to read. Because I turned every page and quickly glanced at the page and just saw facts and facts and more facts this is what I used to think.

and now I think....



that nonfiction is not just full of facts but is also contained with text features too. For example: diagrams, graphs, photographs, captions, glossary and table of contents. That is what I think now.



Digging Deeper

What Makes You Say That?
(Pages 165 – 170)



Digging Deeper

Sentence-Phrase-Word
(Pages 207 – 213)



Suggestions for Getting Started with Thinking Routines

- **Have great expectations.** Students surprise us daily with their connections, ideas, and the multiple languages they use to make their thinking visible.
- **Do the routines pretty much as is initially.** Wait to see what you learn from them before you adapt them.
- **Match the routine to the topics and projects.** The routines are the vehicles for exploring the content.
- **Model the language** for students, especially the younger and less language able students. **Model your own thinking.**



Suggestions for Getting Started with Thinking Routines

- **Use the language of thinking** as much as possible. (“You made a connection.” “I find your point of view so interesting.”)
- **Document students’ thinking.** It shows that we value their thinking and provides opportunities to revisit, reflect on, or reinforce topics later.
- **Focus on the thinking you want to promote.** This will help you attend to students’ thinking as it emerges.
- **Understand that this is a process and takes time.** Be patient, consistent and a risk taker.

“Most of all, have the confidence in every learner’s ability to think and your capacity to nurture that thinking. The results will amaze and energize you.” - Ron Ritchhart





Making Thinking Visible

Goals:

- To facilitate greater understanding
- To develop meta-strategic or meta-learning knowledge

As a result, students will..

- demonstrate greater understanding
- become more engaged
- display independence as learners