**MAKING THINKING VISIBLE: Learning Strategies**

VISUAL TEACHING STRATEGIES (the basics)

Present a carefully selected images

Allow for a few moments of silent looking

Depending on the age and skill of the students, allow them to take notes (great practice for generating evidence to prove their point)

Ask the following questions

* What’s going on in this picture?
* What do you see that makes you say that?
* What more can you/we find?

Some specific components of the strategy:

* Put your hand on the portion of the image as the student mentions it
* Paraphrase the student comment
* Link student comments, whether they agree or disagree
* Do not evaluate as correct or incorrect (yes—this is tough)

VTS is great—it gives kids permission to wonder, allows them to use what they already know, they don’t need to recall anything, as everything they need is right there—basically it calls for identification, observation, evaluation and tweaking. It encourages students to find the narrative in the visual.

Mostly, it is not about right or wrong, but engaging students in a process of learning **how** to think rather than **what** to think.

They learn that knowledge is created—not delivered by a teacher but a process of exploration

It works well with many of the strategies that follow, particularly

I Used to Think, But Now I Think

Zoom In

It can also be extended to other disciplines, such as Math, Text (Poetry) and Social Studies

It is good for Writing as Well—I will address those later in the workshop

<http://www.vtshome.org/>

Let’s try with Winslow Homer’s Snap the Whip <http://www.winslowhomer.org/images/paintings/snap-the-whip.jpg>

PASS THE BATON

To be used with primary source objects or texts or paintings or an idea.

Instruction to teachers:

Think about how this ‘entity’ might be used at the Elementary, Middle School and High School levels. What elements are appropriate for each? What expectations do you have about the understanding and knowledge of your students as they enter the next level of education? What can the next level’s teachers expect to inherit from you?

Suggest a ‘path’ for this object. In may be placed in any discipline or course, and used more than once but it must be incorporated in at least 3 points in the K-12 curriculum.

Illustrate the path of the object. Facilitator will provide examples for participants.

Let’s use Uncle Sam’s Family Tree http://maps.bpl.org/id/12971

Alternative—3 different academic disciplines. Change to what expectations do all disciplines share? How do they differ from one another. What is Common in the Common Core?

\*ONE SENTENCE PROJECT

Daniel Pink explaining the project

<http://www.danpink.com/2010/10/whats-your-sentence-the-movie/>

Examples

<http://vimeo.com/18347489>

Extend to education—one sentence about a book you read, a person you learned about, an event

what you want the students to understand

Illustrate your sentence

Do one sentence for key terms—like Teacher, Student or subject matter-Math, Science

FIND SOMEONE AND ASK

Perspective builder for looking at art, reading poetry

Use of pair-share concept

also want to add how the perspective of others changes how you see things

as in—now I notice…

SEE-THINK-JUSTIFY-WONDER

Students look at visual document

Respond to following questions

What do you See?

What do you think is going On?

Justify your answers—why do you think/say that?

What does it make you Wonder?

Have students work in the following way

Divided in small groups, they first respond individually, the come together and discuss. Come to a consensus on each.

Present to larger group.

ZOOM-IN

*We used this with the slave photograph as well as with the political cartoon when I decided to go into more depth to think about the role of context*

Each student gets part of a whole—could be a piece of writing, steps in an experiment, a set of instructions

Begin with Six Blind Men and the Elephant—

As well as the poem

<http://www.constitution.org/col/blind_men.htm>

what do they ‘know’ looking at one part

what do they know as they look at a second part (pair-square)

design a task by grade/discipline

Allows for exploration of concept—**what we know can change**

Alternative: Reveal each part of a picture slowly—

Here we will show 3 elements of a picture. All seem quite benign.

And then….



how does

1. understanding increase as they get fuller picture (literally)
2. what questions do they ask at each step—how do questions change as more is revealed

Connect to Strategy—I used to think; now I think—concrete version…

THINK-PUZZLE-EXPLORE

*Used this to introduce the notion of the role of context. The topic was Slavery*

Great to shape teaching; a form of pre and ongoing assessment

What do you think you know about this topic?

What questions or puzzles do you have about this topic?

How might we explore these questions?

Learning ongoing; students plan inquiry

Another alternative way to do PASS THE BATON (how do people consider this topic at different points in their education/in different disciplines) and shows that learning is ongoing

Example from book: TIME

Alternative: What is a credible source for this topic?

3-2-1

this strategy is done at several points—begins as pre-assessment, then ongoing assessment, as well as instructional direction provider

Before you introduce a topic/idea

3 words

2 questions

1 metaphor/simile/analogy—for pre-readers—great way to teach symbols—what picture can you draw that makes you think of this? Can go from concrete to abstract, e.g. Will use with What is a Map –to Ideas about Bias

As you continue on, what 3 new words, 2 questions, 1 metaphor/simile/analogy

COMPASS POINTS

*We used this strategy to explore the shift to the Common Core*

Ideal for project based learning

Set up in for parts of the room

Excitement, Worries, Needs, Suggestions—

Have kids brainstorm, post stickies, do gallery walk

Perhaps before a new unit, major project; help adjust the rubric

Example with teachers—shift to the Common Core; teacher evaluation

Something parents may also experience—use on back to school night

THE EXPLANATION GAME

*This is the same as Visual Teaching Strategy*

Name it—what do you see—hone in on a feature, small item

Explain it—what could it be—what role or function might it have; why might it be there

Give reasons-why do you say that or why do you think it happened that way

Generate alternatives—what else could it be?

Great example on DVD—with K students looking at a painting—show clip

And ask teachers to model strategy:

What do you see/What could it be/Why do you say that

What did students notice?

What questions did teacher ask?

How did the teacher use the routine?

Formative Assessment

Gives Teaching Direction

Can also be used to deconstruct abstract ideas—

Family, School Rules, Government

HEADLINES-write a headline for this topic, issue, piece of text, visual document that summarizes and captures a key aspect that you feel is significant and important

Allows students to stop and reflect

Take a gallery walk to observe

Do they see what I see?

What am I Missing? Can be connected to Zoom-In

 Perspective Building

Alternative: Captions

COLOR-SYMBOL-IMAGE

Great Example on DVD from HS Chemistry class on Stoichiometry

Good for pre-reading or nonverbal learners—also distill down to essence of an idea

Way to explore topic, idea, person, event, whatever

Choose a color that you think best represents the essence of that idea person, event, whatever

Create a symbol that you think best represents the essence of that idea, person, event, whatever

Sketch an image that you think best captures the essence of that idea person, event, whatever

Students also have to explain their choices—think-pair-share-square

CONCEPT MAPS

Generate a list of ideas and initial thoughts that come to mind when you think about this topic

Sort your ideas according to how central or tangential they are –place central ones closest, others further away on the page

Connect your ideas by drawing lines between ideas that have something in common—explain connection on the line in a phrase

Elaborate on any ideas or thoughts you have written by adding new ideas that expand, extend or add to your initial ideas

[can do on a single piece of paper or with index cards or of course my favorite—stickies-allows you to move, change ideas around]

good examples—lesson plans, assessment, critical thinking, teaching a new topic

CONNECT/EXTEND/QUESTION

How are ideas and information CONNECTED to what you already know

What new ideas and information did you get that EXTENDED your thinking in new directions

What new QUESTIONS do you now have from what you have learned

Or put another way—what do want to learn more about

This is a good precursor to research

CHECKING IN

What did you Connect to?

What didn’t you agree with?

What question do you have?

What did you think was important?

What was a new thing you learned?

For readers—good check for independent reading

For pre-readers or non verbal students—what did they hear or see?

I USED TO THINK/TUG OF WAR/BALANCING ACT

Help students build arguments/see perspective

Take issues that are decidedly not black and white

Can also use image of a balance

Put things on both sides of the scale

Each time you put something on the scale, you have to explain why it is an important consideration

Possible topics for teachers: longer school year/day; teacher evaluation

Use with WHAT MAKES YOU SAY THAT?

For kids: all ice cream lunch; recess all day long/grades/going to bed early/grades

Use chocolate bar problem

Follow up with I used to think; now I think

WHAT MAKES YOU SAY THAT

A way of probing students to exploring their thinking

Started with visual thinking strategies—what’s going on in this painting

Look at DVD of kindergarten students

But have to back it up

But also do not in a confrontational way but in a way that invites inquiry

At the core is unpacking observation—kids say things because

1. they think it is what we want to hear (this increases year by year)
2. become more entrenched in opinions

Need to reconnect them to process of identifying origins of their observations

BIAS IS OK—just ascertain its origins—start with literal bias—what is the slant you see—do this in conjunction with FROM WHENCE OPINIONS

CIRCLE OF VIEWPOINTS/STEP INSIDE

Perspective building and role playing

Imagine a situation from multiple points of view

Assign students different roles

What question might each person ask in that role

How would they answer the question in different roles

First Day of School: 4 people

Kindergarten student new to school

Older sister of Kindergarten Student

Principal

New Teacher of older sister

Who Might get lost?

Who might be able to help out?

Who is the most scared the night before?

What is a question each person might ask?

Change roles

Go from the concrete to the abstract—school rules to waging war

Be on the inside and outside of a group—revealed and hidden issues

Show Slave photo:

Photograph of slaves picking cotton on Hilton Head [http://www.flickr.com/photos/59843331@N03/5468267625/in/photostream](http://www.flickr.com/photos/59843331%40N03/5468267625/in/photostream)

Select a person in the photo—what is he thinking?

What was he thinking 10 minutes before the picture was taken?

Who else is in this person’s life that you can’t see?

WHEN CAN I SAY THAT

When are absolutes acceptable in education?

When is it OK for your students to say ALWAYS OR NEVER?

When is it OK for a teacher to say ALWAYS OR NEVER?

When is it good to say MAYBE, OFTEN, SOMETIMES?

Put large Blank sheets around the room with those words at the top. Ask the students when they use these words.

FROM WHENCE OPINIONS

*We spent a lot of time looking at data and from where opinions come*

*The person from the national archives look at 3 data sets with the group, each progressively less structured to see how one connects information to opinions*

*I also had them ask questions based on what they observed in the world around them and design an experiment that might produce an answer to their question*

 Identify your bias

People have strong opinions but John Locke was correct—they are born *tabula rasa*—as blank slates. They come to these biases through their experience with the world. There are several steps here

Identifying what one’s biases are—bias is not good or bad. The word means slant. Just see which way you lean

The second step is connecting bias or opinion to facts which means distinguishing between them. This tends to be awfully abstract for kids.

Facts are things that can be measured; favorite example—it is 46 degrees out. That is a measurable fact. If you think that is cold—that is an opinion.

Sue is 4 feet 2 inches. Is she tall or short? Need more facts. If she is 6 years old, she is tall. If she is 26 years old, she is short.

[also a nice way to review nouns and adjectives]

Generate a list of facts about a topic about which the students have an opinion—a sports team, a favorite movie, a special relative—keep it light.

Now connect the list of facts and let them see how that led them to the opinion.

What happens if they get information that contradicts the opinion?

That’s OK because they need to understand that you can like something but not everything will be positive or support their case. You are also helping them to learn how to make an argument, both orally and in writing, which we will tackle later. Not about agreement, but about PROCESS

And people can have negative opinions about things too but the important point is that opinions STEM FROM FACTS

SENTENCE-PHRASE-WORD

Can use with reading text or visual documents/image/scene or story with pre or non-readers—also great with negotiation—Yes And/Yes But

<http://youtu.be/cSzCfsGvwj0>

or Listening Maps--http://youtu.be/RGF8xz\_B3hM

<http://cc.betterlesson.com/lesson/485876/setting-the-right-tone-for-the-school-year-dear-students-returning-to-school>

Always good to have a recorder in the room for such activities

Identify as SENTENCE that was meaningful to you

Identify a PHRASE that moved, engaged or provoked you

Identify a WORD that captured your attention or struck you as powerful

With things other than written text, substitute images, scenes, etc

Have students do as Think-Pair-Share first, perhaps discuss themes they can connect to if this part of a larger unit.

Also, if it is one of a series of texts or images they are looking at around a theme, does it miss any part of the theme?

How does it extend their understanding of it?

**FAVORITE VISUAL RESOURCES**

Clark Art Institute (Curate your own exhibition) http://remix.apps.clarkart.edu/

Harpers’s Weekly (Political Cartoons) <http://www.harpweek.com/>

Lessons in Looking, <http://picturinghistory.gc.cuny.edu/mtr.php>

Matters of Education (my website) <http://mattersofeducation.org/>

 [NB—lessons on generic visual sources-- <http://jwa.org/teach/primarysources/abouttypes.html>

The Document Study Sheets provide teacher and student sheets for several types of visual resources]

Museum of Fine Arts Boston, <http://educators.mfa.org/home>

Metropolitan Museum of Art, [http://www.metmuseum.org/collection/the-collection-online](http://www.metmuseum.org/collection/the-collection-online%22%20%5Ct%20%22_blank)

University of Chicago Museum Website http://smartmuseum.uchicago.edu/

Many of these strategies have been adapted from

*Making Thinking Visible*, book and DVD

Ron Ritchart, Mark Church and Karin Morrison. San Francisco, Jossey-Bass, 2011.

**Activity: Go and Explore!!!!**

Working with a partner, select one of the websites above. Find an image and plan an activity for a group of students that will make THINKING VISIBLE FOR THEM!!!