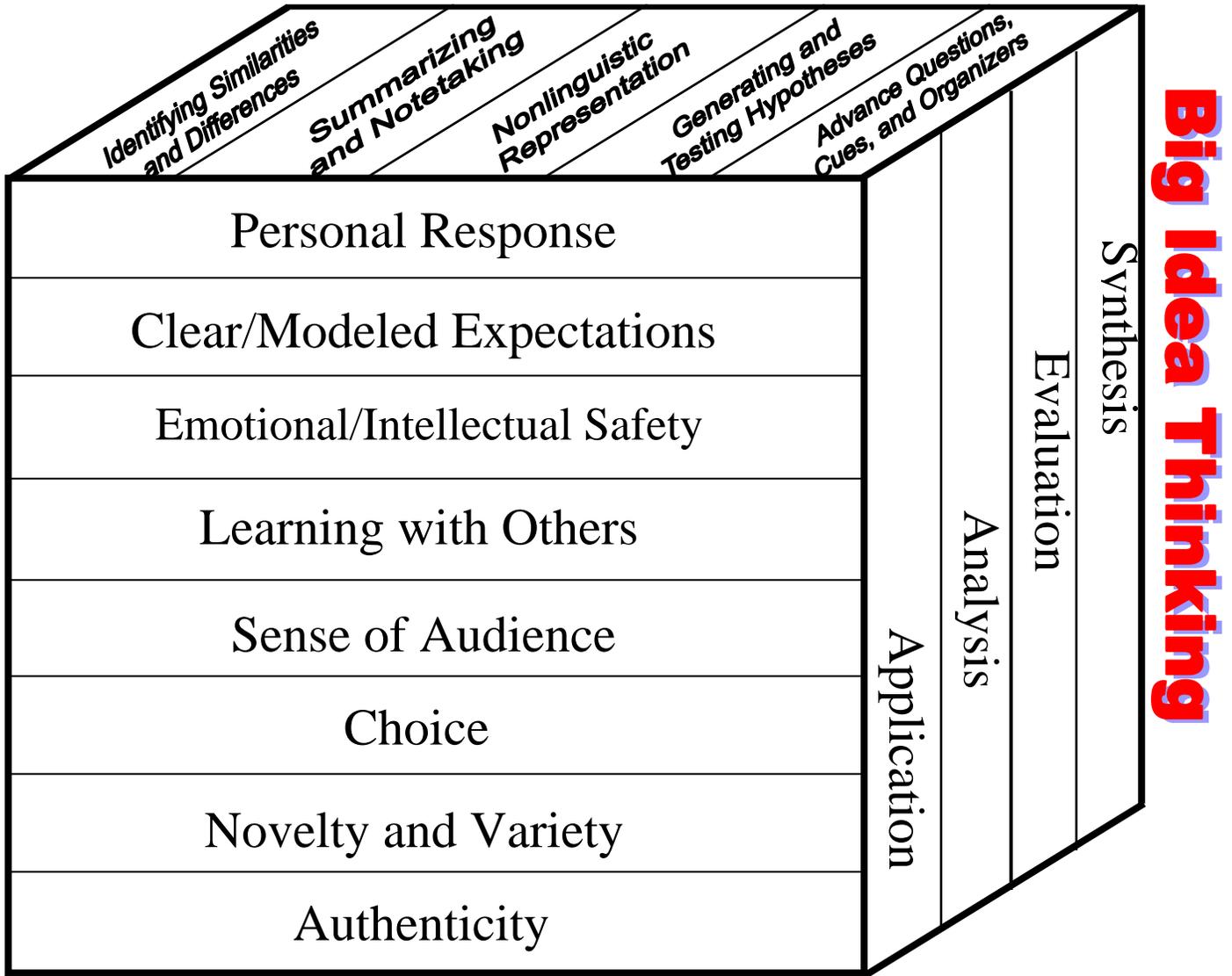


The Learning Cube:  
*Engaging the Whole Child,  
Every Child*

# High Yield Instructional Strategies



## 8 Engaging Qualities of Work

Marzano, R., Pickering, D. & Pollock, J. (2001). *Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.

Bloom, B., Englehart, M. Furst, E., Hill, W., & Krathwohl, D. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. New York, Toronto: Longmans, Green.

Schlechty, P. (2002) *Working on the Work*. San Francisco, CA: Jossey-Bass.

High-Impact  
Thought Processes . . .

*Information and  
Communication*

1/15/2008

---

---

---

---

---

---

---

---

*to inform + to communicate =*

1/15/2008

---

---

---

---

---

---

---

---

*Bloom's Taxonomy of  
Learning*

**Evaluation**  
**Synthesis**  
**Analysis**  
**Application**  
**Comprehension**  
**Knowledge**

1/15/2008

---

---

---

---

---

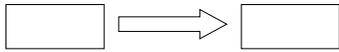
---

---

---

*Bloom's Taxonomy of Learning*

**Knowledge . . . repeated**



1/15/2008

---

---

---

---

---

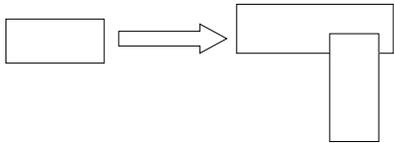
---

---

---

*Bloom's Taxonomy of Learning*

**Comprehension . . . Represented  
. . . Translated**



1/15/2008

---

---

---

---

---

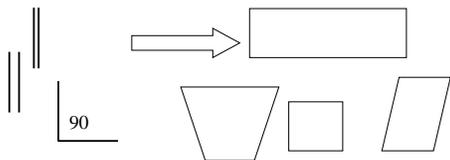
---

---

---

*Bloom's Taxonomy of Learning*

**Application . . . Using the RULE  
yes/no based upon RULE**



1/15/2008

---

---

---

---

---

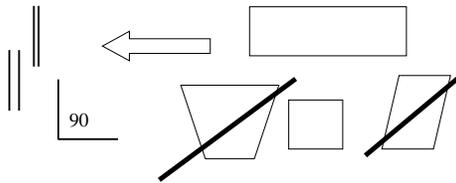
---

---

---

*Bloom's Taxonomy of Learning*

**Analysis . . . Discovering the RULE  
Breaking apart**



1/15/2008

---

---

---

---

---

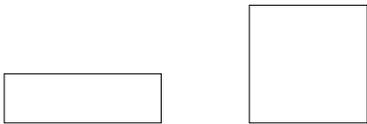
---

---

---

*Bloom's Taxonomy of Learning*

**Evaluation . . .  
Decisions/choices/judgment  
based upon the RULE**



1/15/2008

---

---

---

---

---

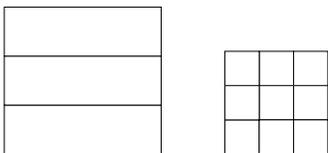
---

---

---

*Bloom's Taxonomy of Learning*

**Synthesis . . . Creating a new  
version (rule + creativity)**



1/15/2008

---

---

---

---

---

---

---

---

## QUALITIES OF ENGAGING STUDENT WORK

A critical factor for improving learning lies in providing high quality work for students—work that is engaging and that enables students to learn what they need in order to succeed in the world.

The traits of engaging student work listed below evolved from Dr. Phillip Schlechty's book, *Working on the Work*. A chart accompanies each trait and provides examples of what the trait looks like in the hands of the learners as well as non-examples for clarity

### **Personal Response – *More than one right answer***

Work that engages students almost always focuses on a product or performance of significance to students. When students explain their answers or the logic and reasoning behind those answers, they are invested in their personal response.

It is not . . .	What it looks like . . .
<ul style="list-style-type: none"><li>• Recall of answers</li><li>• Only one answer possible</li><li>• Only one answer accepted</li></ul>	<ul style="list-style-type: none"><li>• Supported predictions</li><li>• Opinions</li><li>• Remembrances</li><li>• Connections</li><li>• Comparisons</li><li>• Analogies</li><li>• Summary Statements</li><li>• Explanations</li><li>• Strategies</li><li>• <i>I think . . . because . . .</i></li></ul>

Cautions: Optimal personal response is based upon activities that force *all* students to articulate their ideas, rather than four or five students. For that reason, written personal response may be more powerful than oral response.

### **Clear/Modeled Expectations – *Student knows what success “looks like”***

Students prefer knowing exactly what is expected of them, and how those expectations relate to something they care about. Standards are only relevant when those to whom they apply care about them.

It is not . . .	What it looks like . . .
<ul style="list-style-type: none"><li>• Oral explanations by teacher</li><li>• Inconsistent expectations</li><li>• “grading”</li></ul>	<ul style="list-style-type: none"><li>• Clear objective of activity and learning</li><li>• Models of expectation and strategy</li><li>• Visual exemplars that persist</li><li>• Rubrics and self-assessment</li><li>• Clear formats and procedures</li><li>• Sources</li><li>• Quantity and quality required in personal response activities</li><li>• <i>I included . . .</i></li></ul>

### **Emotional/Intellectual Safety – *Freedom to take risks***

Students are more engaged when they can try tasks without fear of embarrassment, punishment, or implications that they’re inadequate. Personal response activities that students must support with logic, reasoning or explanation require more intellectual safety than answering a question that has only one right answer.

It is not . . .	What it looks like . . .
<ul style="list-style-type: none"><li>• Answering single-answer questions</li><li>• Answers without explanation</li><li>• Students being “correct” or “incorrect”</li><li>• Students critiqued</li></ul>	<ul style="list-style-type: none"><li>• Student explain why/how their answer is plausible</li><li>• Students take risks with “unpopular” or more subtle answers</li><li>• Sources, evidence, and examples are cited</li><li>• Reasoning first, answers second</li><li>• Answers questioned or defended</li><li>• <i>I disagree with the author because . . .</i></li></ul>

**Learning with Others – *Learning has a social component***

Students are more likely to be engaged by work that permits, encourages, and supports opportunities for them to work interdependently with others. Those who advocate cooperative learning understand this well, and also recognize the critical difference between students working together and students working independently on a common task, which may look like group work but isn't.

It is not . . .	What it looks like . . .
<ul style="list-style-type: none"> <li>• Simply taking turns talking</li> <li>• Group grades only</li> </ul>	<ul style="list-style-type: none"> <li>• Think, pair, share</li> <li>• Literature circles</li> <li>• Small group discussion</li> <li>• Reciprocal teaching</li> <li>• Peer revision or review</li> <li>• A reports/paraphrases B's thoughts</li> <li>• <i>When David talked about the symbolism, I thought about . . .</i></li> </ul>

**Sense of Audience – *Student work is shared***

Students are more highly motivated when their parents, teachers, fellow students and "significant others" make it known that they think the student's work is important. Portfolio assessments, which collect student work for scrutiny by people other than the teacher, can play a significant role in making student work "more visible."

It is not . . .	What it looks like . . .
<ul style="list-style-type: none"> <li>• Being "singled out"</li> </ul>	<ul style="list-style-type: none"> <li>• Increased level of concern</li> <li>• Connections to audience/purpose</li> <li>• Voice</li> <li>• Responsibility to the group</li> <li>• Proficient work posted</li> <li>• Student work as exemplars</li> <li>• The ballgame, the concert, the play</li> <li>• <i>When I finish this business letter, I will mail it to . . .</i></li> </ul>

**Choice – *Students have meaningful options***

When students have some degree of control over what they are doing, they are more likely to feel committed to doing it. This doesn't mean students should dictate school curriculum, however. Schools must distinguish between giving students choices in what they do and letting them choose what they will learn.

It is not . . .	What it looks like . . .
<ul style="list-style-type: none"><li>• Opting out of standards</li><li>• Avoiding an assignment</li><li>• Overwhelming choices</li></ul>	<ul style="list-style-type: none"><li>• Tiered assignments</li><li>• Self-selected reading material</li><li>• Product</li><li>• Selecting tasks from a list</li><li>• Meaningful options</li><li>• Decision making</li><li>• <i>I chose to present my thoughts in graphic form.</i></li></ul>

**Novelty and Variety – *Learning experiences are unusual or unexpected***

Students are more likely to engage in the work asked of them if they are continually exposed to new and different ways of doing things. The use of technology in writing classes, for example, might motivate students who otherwise would not write. New technology and techniques, however, shouldn't be used to create new ways to do the same old work. New forms of work and new products to produce are equally important.

It is not . . .	What it looks like . . .
<ul style="list-style-type: none"><li>• Chaos</li><li>• Lack of procedures and protocols</li></ul>	<ul style="list-style-type: none"><li>• Variety of products</li><li>• Diverse perspectives</li><li>• Integrated fun</li><li>• Layered interests</li><li>• Games</li><li>• Simulations and role-play</li><li>• Competitions</li><li>• Responding “in the voice of . . .”</li><li>• <i>Rather than working problems in math, we wrote two new word problems.</i></li></ul>

**Authenticity – *Connections to experience or prior learning***

This term is bandied about quite a bit by educators, so much so that the power of the concept is sometimes lost. Clearly, however, when students are given tasks that are meaningless, contrived, and inconsequential, they are less likely to take them seriously and be engaged by them.

It is not . . .	What it looks like . . .
<ul style="list-style-type: none"><li>• Vocabulary in isolation</li><li>• Contrived activities</li><li>• Practice without context</li><li>• Repetition of low-level work</li></ul>	<ul style="list-style-type: none"><li>• Relevance to age/group</li><li>• Tasks that represent the personalities of the learners</li><li>• Real-life activities</li><li>• Inquiry or discovery learning</li><li>• Hands-on manipulative</li><li>• Current events/issues</li><li>• Learn then label</li><li>• Transfer or synthesis beyond content</li><li>• Extension of workplace activities</li><li>• Use of workplace or home technology</li></ul>

# Z for Me: Personal Response with High-Yield Strategies

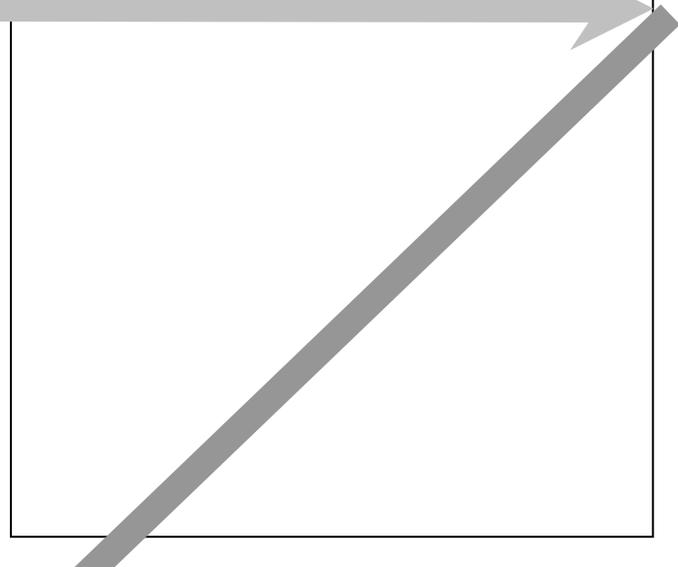
Strategy: \_\_\_\_\_

Critical: \_\_\_\_\_



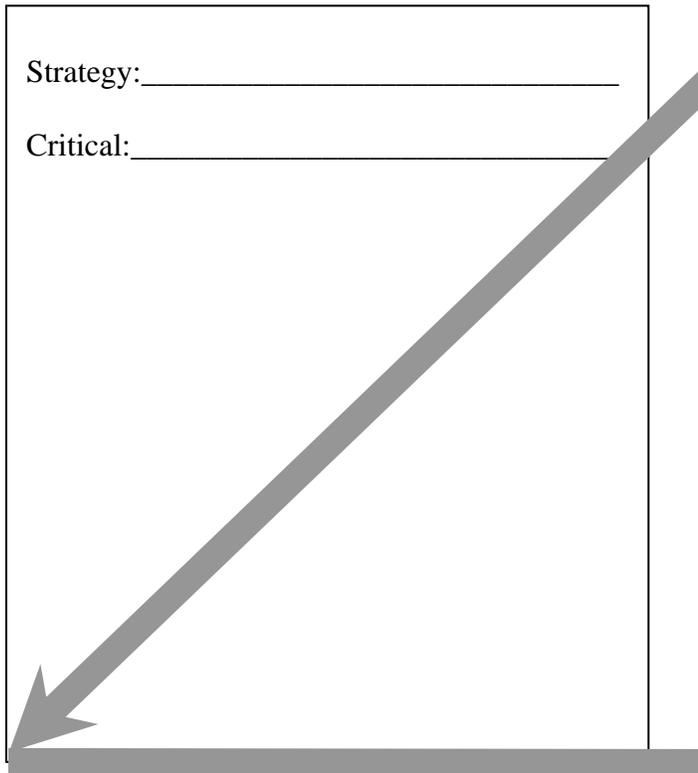
Strategy: \_\_\_\_\_

Critical: \_\_\_\_\_



Strategy: \_\_\_\_\_

Critical: \_\_\_\_\_



Strategy: \_\_\_\_\_

Critical: \_\_\_\_\_



Strategy: \_\_\_\_\_

Critical: \_\_\_\_\_

ART Lesson

Part 1	IS: Bloom: Engaging Quality:
Part 2 a. b. c.	IS: Bloom: Engaging Quality:
Part 3	IS: Bloom: Engaging Quality:
Part 4	IS: Bloom: Engaging Quality:

## The 4 R's of Reflective Summary

### **Restate the main idea: What is it all about?**

Write a summary.

**The purpose:** to synthesize

Restatement starters include:

*The main idea of the essay is . . .*

*What happens in the story is . . .*

*The chart tells me . . .*

### **React to the text: What do I think about the presentation?**

Write a present-tense reaction to the text or ideas under consideration.

**The purpose:** to formulate a personal reaction.

Reaction starters include:

*I like the story because . . .*

*I'm like the story in that . . .*

*I'm disappointed because . . .*

*I agree because . . .*

*I found the argument to be weak in that . . .*

### **Remember the connections to the text:**

#### **What have I seen or experienced that was connected to the information?**

Write an anecdotal statement from past experience that illustrates or serves as an example of the main idea.

**The purpose:** to connect with experiential evidence

Reaction starters include:

*This reminds me of the time when . . .*

*One time on television . . .*

*I have certainly seen . . .*

### **Respond to the information: What questions does the information raise?**

Write a list of questions the text/chart brings to mind.

**The purpose:** to identify problems prior to solving them or to make predictions

Reaction starters include:

*What would happen if . . . ?*

*Is this the same as . . . ?*

*Could there be issues of . . . ?*

*What are the implications of . . . ?*

John Medina's *Brain Rules* and connections to the Engaging Qualities:

RULE #1 *Exercise boosts brain power.*



RULE #2 *The human brain evolved, too.*



RULE #3 *Every brain is wired differently.*

RULE #4 *We don't pay attention to boring things*



RULE #5 *Repeat to remember.*

RULE #6 *Remember to repeat.*



RULE #7 *Sleep well, think well.*



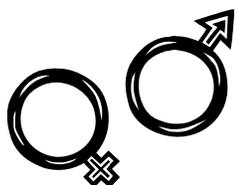
RULE #8 *Stressed brains don't learn the same way.*



RULE #9 *Stimulate more of the senses.*



RULE #10 *Vision trumps all other senses.*



RULE #11 *Male and female brains are different.*

RULE #12 *We are powerful and natural explorers.*



# *Classroom Instruction that Works*

by R. Marzano, D. Pickering, J. Pollock

## **Categories of Instructional Strategies that Affect Student Achievement**

*My thoughts on  
application:*

<b>Strategy</b>	<b>%-ile gain</b>
<i>Identifying similarities and differences</i>	45
<i>Summarizing and note taking.</i>	34
Reinforcing effort and providing recognition	29
Homework and practice	28
<i>Nonlinguistic representations</i>	27
Cooperative Learning	27
Setting objectives and providing feedback	23
<i>Generating and testing hypotheses.</i>	23
<i>Questions, cues, and advance organizers</i>	22

# Classroom Data Analysis

Behavioral Continuum

**Adult Behaviors**

**Student Behaviors**

The continuum represents a range of behaviors in the classroom. As we move from left to right on the continuum, actions progress in effectiveness and sophistication.

The data points above the line are associated with teacher actions, while those below the line correspond to student-controlled actions. In general, implementation should progress from the upper left to the lower right of the continuum.