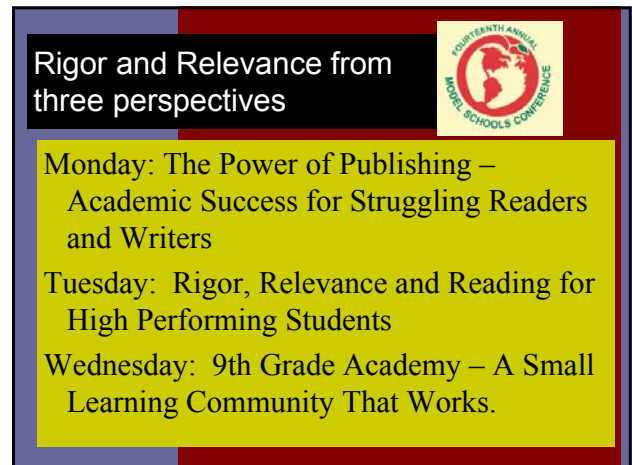
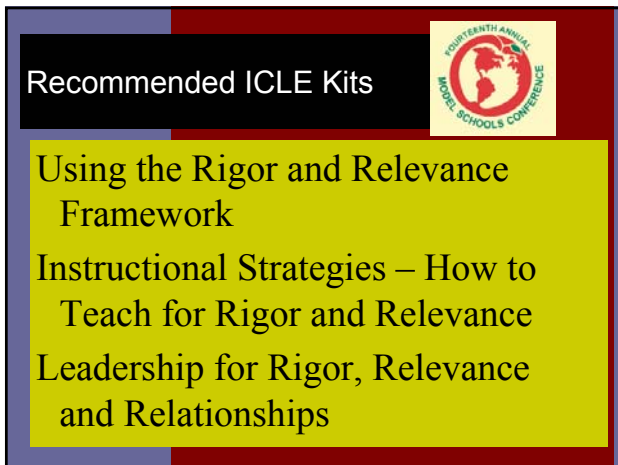
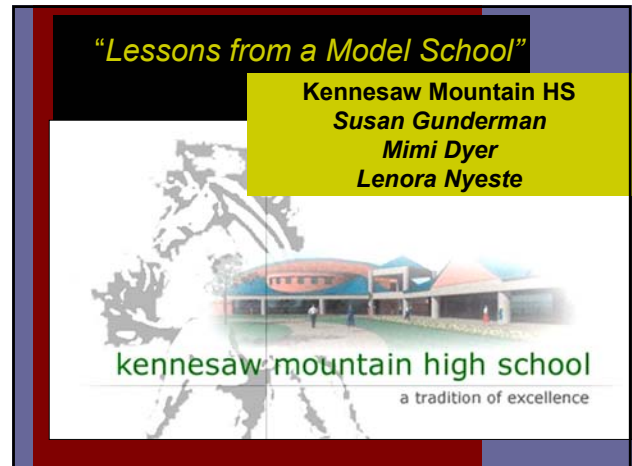
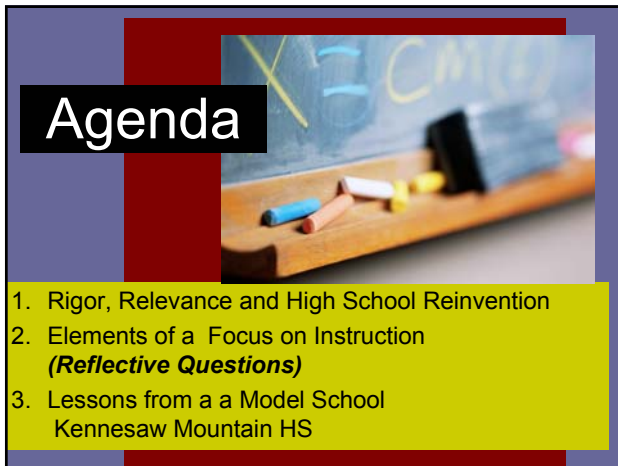
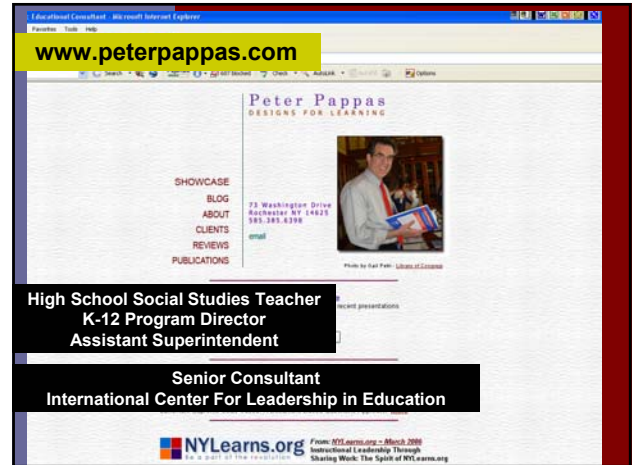


Model Schools '06 "High School Reinvention - Focus on Instruction"



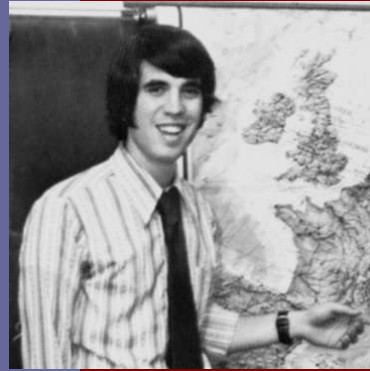
Model Schools '06 "High School Reinvention - Focus on Instruction"

High School Reinvention

Our essential questions:

"Has our school forged a common vision of teaching and learning?"

"How have we organized to accomplish this vision?"



The flow of information in the classroom has changed since I got started

New technologies have put students in charge of the information they access, store, analyze and share.



Flow of digital information is both personal and collaborative



Students can become their own researcher, editor, and entertainment director.

And join new digital communities – linking them to the people who share their interests.

iPod

5,000-hit wonder.

Mac + PC

Access, catalogue and share



Now Playing on TiVo

The Apprentice Thu 3/25

YAHOO! SPORTS Sign In New User? Sign Up

FANTASY FOOTBALL

Interact and collaborate

Blogger

myspace® a place for friends



Model Schools '06 "High School Reinvention - Focus on Instruction"

Schools function as if they still controlled the flow of information



Literacy in the 21st century will mean the ability to find information, decode it, critically evaluate it, organize it into personal digital libraries and find meaningful ways to share it with others.



Information is a raw material – students will need to learn to build with it

Will your vision of instruction be relevant to 21st century students?



To change the flow of information in this session we'll be using an audience response system



You'll need to share to enter either individual or group response

Audience Response System courtesy of:



Mike Venrose
Turning Technologies
(330) 884-6044
mvenrose@turningtechnologies.com

Feather is to peacock as scale is to:

- 0% 1. shark
- 96% 2. bass
- 4% 3. dolphin
- 0% 4. whale

Model Schools '06 "High School Reinvention - Focus on Instruction"

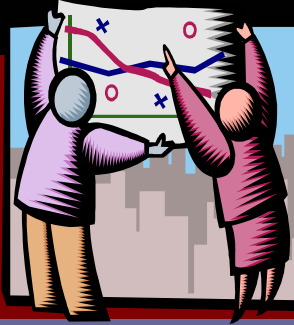
Brain is to processor as eyes are to:

- 0% 1. hard drive
- 0% 2. mouse
- 91% 3. webcam
- 9% 4. monitor

The top two ideas that our school is considering as part of high school reinvention:
One responder per school - Pick 2

- 25% 1. Small learning communities
- 8% 2. Advisory program
- 21% 3. Instructional strategies
- 9% 4. Curriculum changes
- 10% 5. Transition programs
- 4% 6. Scheduling changes
- 3% 7. Leadership and decision-making
- 11% 8. Professional development
- 10% 9. Assessment and data mining

Rigor and Relevance:
A Foundation for Your Vision of Instruction



Bloom's different levels of rigor

Evaluation: appraise, defend, predict

Synthesis: compose, design, develop

Analysis: compare, contrast, categorize

Basic Skills

Application: demonstrate, illustrate, solve

Comprehension: describe, explain

Knowledge: memorize, name, recognize, recall

Make it relevant with real-world application



Using skills and knowledge in school

Using skills and knowledge for myself in the real world

1 2 3 4 5

Question: A cruise ship carries 200 passengers and crew. Each life boat carries 30 passengers. How many lifeboats will the ship need?


Almost one-third of the incoming 9th graders who took a NAEP math test answered



Model Schools '06 "High School Reinvention - Focus on Instruction"

Question: A cruise ship carries 200 passengers and crew. Each life boat carries 30 passengers. How many lifeboats will the ship need?

Almost one-third of the incoming 9th graders who took a NAEP math test answered **"6 remainder 20"**




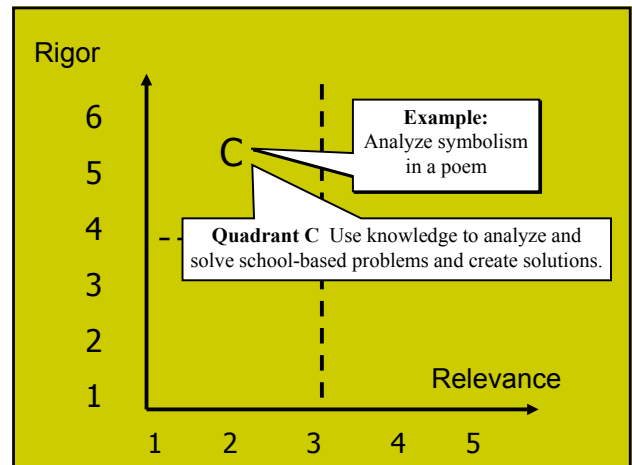
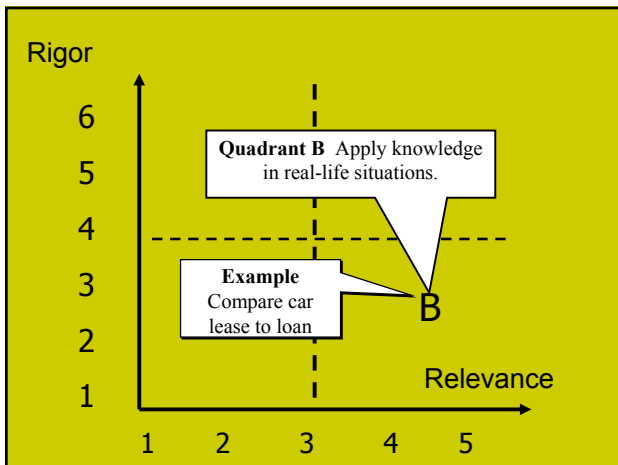
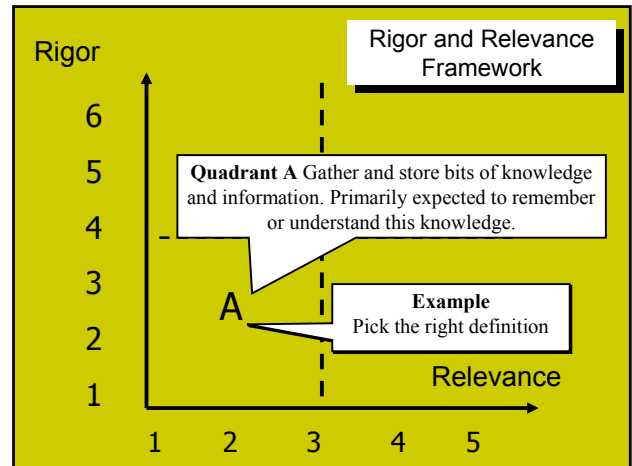
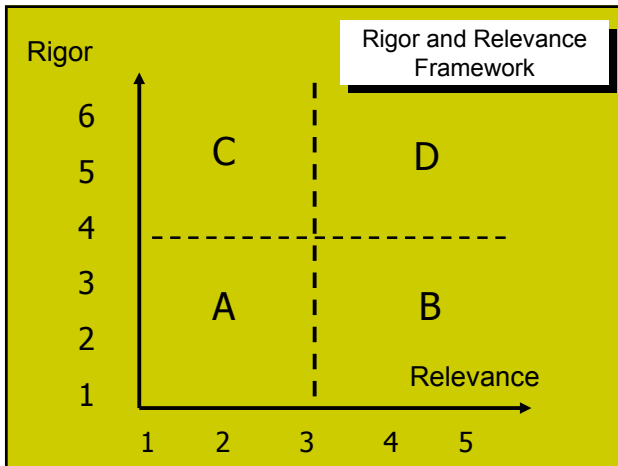
Higher-level thinking skills

Complex use of knowledge

In School: Test scores, class credits, academic progress

In life: Performance, ability to adapt to change


Recall of knowledge

Model Schools '06 "High School Reinvention - Focus on Instruction"

STRATEGIES FOR STRUGGLING READERS

Meet the "Word-Caller"



The "word-caller" reads orally with accuracy and fluency. Silent reading appears rapid, attentive and purposeful. These students can respond to "right-there" questions when they are allowed to reread but their responses are disorganized and tenuous; they cannot generalize, summarize, synthesize, analyze, infer or evaluate. They do not grasp the relationship of ideas or their importance or relevance. "Word Callers" need support to realize that reading is about constructing meaning and to develop and apply those tools.

The "word-caller" also:
 Provides minimal written responses; their work lacks elaboration.
 Seldom volunteers responses; or raises hand to answer but "forgets."
 Performs poorly on tests that require comprehension or understanding.
 Prefers group work for answers.
 Exhibits poor comprehension skills; may read widely and frequently but without understanding.
 Has limited language and vocabulary; does not grasp multiple meanings, connotative meanings, or figurative language.
 Can decode words that are not in oral vocabulary.
 Appears attentive when "reading" but disengages when response is required.

What the "word-caller" says about reading and themselves:

"I can read it, but I do not know what it says."
 "I can read it, but I do not know the answers to these questions."
 "I understand more when someone reads to me."
 "I don't understand what is expected of me."

Teacher's Toolbox

Tool 16: Skim and Scan

Class:
 Unit:
 Date:
 Source Reading

Use this tool:
 ▶ Pre-reading
 ▶ While reading
 ▶ Post-reading

This tool will help my students:
 Define
 Summarize
 Compare

How to use this tool
 The skim and scan strategy helps students quickly perceive readings to develop a better sense of how to read and to thoughtfully set their own purpose for reading.

1. Give students an expository reading assignment such as the chapter of a textbook.
2. Have students skim the reading, as activity like preview in PQIR (Tool 5), scanning the titles, headings, sub-headings, visuals, hyperlinks, first and last paragraphs.
3. Use the form to gather initial thoughts and impressions about the reading in the First Impressions column.
4. Ask students to recall several facts that they used to generate their first impressions. Put three facts in the First Facts column.
5. Have students review their first two columns and then decide what questions they think the chapter will answer. List those in reading purpose question column.

| First Impressions | First Facts | Reading Purpose Questions |
|-------------------|-------------|---------------------------|
| | | |

To Increase Rigor and Relevance:

1. Allow students to compare forms and discuss how their ideas are similar or different. Also discuss why their thinking is different and whether it is equal. Ask them to explain what it was in the text that generated their impressions of the reading.
2. Have students review their responses after reading the assignment.
3. Ask students to evaluate the author's success at effectively communicating their main ideas to the reader.

Reader's Toolbox

Tool 15: SAW Student Action Words

Student Name:
 Class:
 Date:
 Reading Assignment:

I can use this tool:
 ▶ Before I read
 ▶ While I read
 ▶ After I read
 ▶ How to help me help you
 ▶ Learn new words
 ▶ Compare information and ideas

| Vocabulary word | Question | My usage of the Word |
|------------------------------------|---|----------------------|
| Page: | | |
| My Definition: | Dictionary Definition: | |
| My Antonym (opposite of the word): | My sentence to help me remember the word: | |

How to use this tool

1. Select interesting vocabulary words from a reading.
2. Open the actual resource and page number where the word appears.
3. Define the word in your own words.
4. Look up the definition of the word in the dictionary and add it to the chart.
5. Write an sentence (using that in the opposite of the word)
6. Draw an image and write a sentence that helps you to remember the meaning of the word.

| Vocabulary word | Question | My usage of the Word |
|-----------------|---|----------------------|
| Page: | | |
| My Definition: | Dictionary Definition: | |
| My Antonym: | My sentence to help me remember the word: | |

Here's something I learned by using this tool:

www.edteck.com/read

content reading strategies THAT WORK

Literacy and Content Area Reading Strategies For Academic Success

Boost student achievement with rigor, relevance and literacy strategies for academic success. Designed for high school teachers of all disciplines, the session will demonstrate that teachers don't have to sacrifice content or become a reading teacher. Teachers will find out how to support their subject area while building student literacy skills in mastering vocabulary, comprehension and analysis. Custom workshops available - from a few hours to a few days.

by Peter Pappas
 Senior Consultant International Center for Leadership in Education

Teachers comment on Peter's Workshop

- "Informative and inspirational"
- "With the remainder of these strategies, I'm seeing how I can be a better teacher."
- "It's great to get new ideas that are directly related to practice and can be used right away."
- "Great examples and wonderful tools. Applicable to all disciplines."
- "After today's presentation, I'm thinking about changes that I want to make in my teaching strategies."
- "Helped me to think about Bloom's Taxonomy in a real way - what is that!"

Rigor, Relevance and Reading for High Performing Students

"Designed for honors / AP level teachers who think that an engaging learning environment is more than an inspired lecture. Learn strategies to enable your students to read, reflect, and write like historians, scientists, mathematicians, and literary critics.

Teachers will find out how to support subject area mastery while building student literacy skills in defining, summarizing and analysis."

Tuesday - 2 Sessions


Students who can function in an **academic or real-world setting** that is **unpredictable and vital**

Learn to research, think, problem-solve and write like a **scientist, engineer, coach, artist, historian, mathematician, writer, musician, ...**

Model Schools '06 "High School Reinvention - Focus on Instruction"

Learning strategies are tools.


Let's look in the toolbox?



Three "high yield" strategies

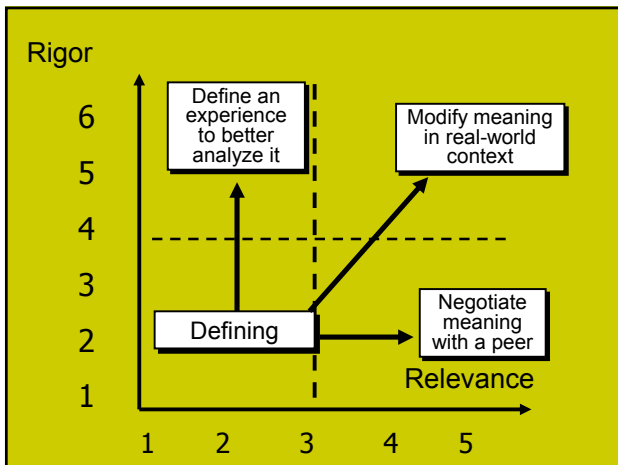
- 1. Defining:** negotiating meaning
- 2. Summarizing:** synthesis and judgment
- 3. Comparing / Classifying:** assessing similarities and differences

We'll use the Rigor and Relevance Model as a framework



Focus on Instruction: Reflective questions for your team to consider.

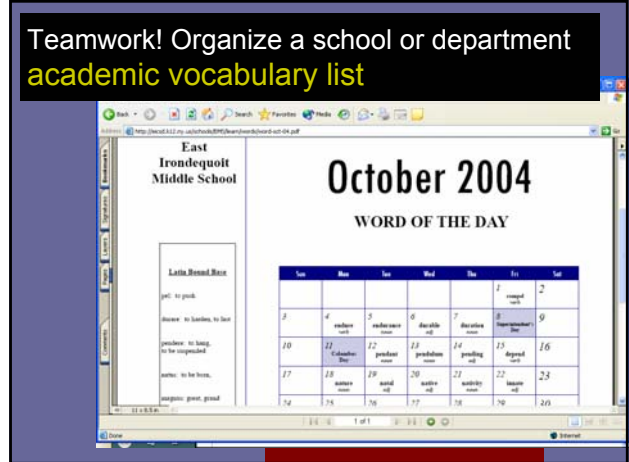
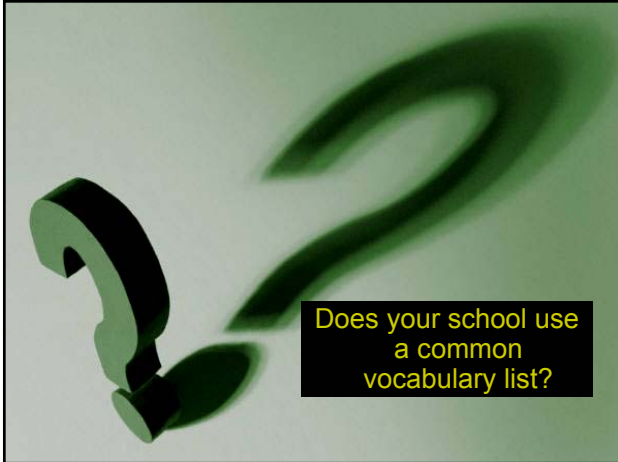
Strategy #1: Defining negotiating meaning

The relationship between vocabulary and academic achievement is well established ~ Marzano, *What Works in Schools*

- Students with **large vocabularies** have **more background knowledge**
- Some students come to us from **home environments that are not academically rich**
- Vocabulary can be taught:
 - **Wide reading:** more engaging, but may lack sufficient word exposure
 - **Direct instruction:** should be student-centered rather than rote-memorization

Model Schools '06 "High School Reinvention - Focus on Instruction"



| <u>Latin Bound Base</u> | Mon | Tue | Wed | Thu | Fri |
|-----------------------------------|--------------------------|------------------------|--------------------------|-------------------------|-----|
| pel: to push | | | | | 1 |
| durare: to harden, to last | 4 endure verb | 5 endurance noun | 6 durable adj | 7 duration noun | 8 |
| pendere: to hang, to be suspended | 11 Columbus Day | 12 pendant noun | 13 pendulum noun | 14 pending adj | 15 |
| natus: to be born, | 18 nature noun | 19 natal adj | 20 native adj | 21 nativity noun | 22 |
| magnus: great, grand | 25 magnificent adj | 26 magnify verb | 27 magnanimous adj | 28 magnitude noun | 29 |

I think it would be a good idea if we organized a **common vocabulary list**

75% **1. Strongly Agree**

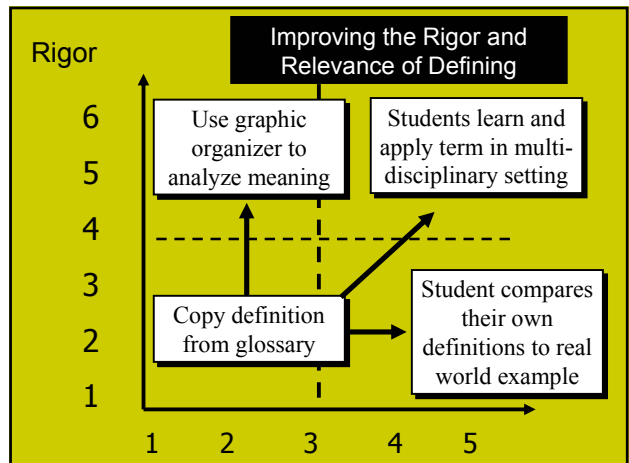
21% **2. Agree**

2% **3. Disagree**

2% **4. Strongly Disagree**

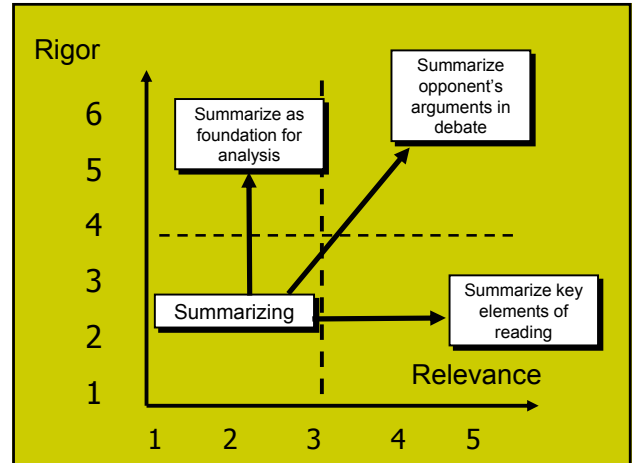
Strategies for teaching defining skills

1. Connect new vocabulary with *prior knowledge*
 - What they **think they know**
 - Brainstorm **their own explanations** of terms
 - **Introduce with story, current event, image**
2. Give students a chance to more *deeply process* vocabulary to internalize meaning
 - Create their own **non-linguistic models** of terms
 - Activities that **explore, restate, discuss terms with peers**
 - Finalize with **reflection and revisions** to vocabulary notebooks



Model Schools '06 "High School Reinvention - Focus on Instruction"

**Strategy #2:
Summarizing
synthesis and
judgment**



Research shows student use of summarizing skills results in a 34-percentile gain in student performance.
Classroom Instruction that Works, ASCD, 2001

Case 1:
Teacher lectures on the essential characteristics of mammals

Case 2:
Teacher lectures and then students do a summarizing exercise on the essential characteristics of mammals

+ 34% gain in content mastery

Does your school use common strategies to set the purpose for reading?

If we expect our student to synthesize the essential information, do we help them set a purpose for their reading?

Think of purpose we set for our reading

Students need to know what they should expect to learn

- Main points or details?
- Sequence of events?
- Author's viewpoint?
- Connections to previous learning?

Would your students benefit from standardized reading assignment form?

1. Specific passage and due date
2. Purpose – what should they know or be able to do? And pay special attention to:
3. New vocabulary that they will encounter
4. Text features – headings, bold face, images, data, graphs, footnotes
5. Reading tips – skim, make predictions, summarize, organize details, take notes

Model Schools '06 "High School Reinvention - Focus on Instruction"

I think it would be a good idea if we used **common strategies to set the purpose for reading**

- 87% **1. Strongly Agree**
- 13% **2. Agree**
- 0% **3. Disagree**
- 0% **4. Strongly Disagree**

Key comprehension skills

- **Identify details** – can you identify key symbols, words, visual elements?
- **Recognizing context** –where is this taking place, time period, who's involved?
- **Identify relationships** –who are these people, what is their relationship to one another?

Key comprehension skills

- **Identify opinions** – is there a point of view expressed in the source information?
- **Infer meaning** – is there meaning that can be extracted from what's between the lines?
- **Make predictions** – based on the information, what will happen next?

Active viewing, listening, and reading are the foundation for comprehension / summarizing

Getting the **visual message** right


"So what the artist is saying is ..."

Getting the **spoken message** right

"So what you're saying is ..."

Getting the **written message** right

"So what the author is saying is ..."



Does your school use common discussion group techniques?

Comprehension, summarizing and the spoken message

The teacher **models strategies** then **transfers responsibility** to students working in small groups.

Students learn to independently and flexibly **apply the strategies on their own.**

- Pair – share
- 4-2-1- Free write
- Jigsaw
- Fishbowl
- Clarifying
- Predicting
- Peer Reading Coach

Model Schools '06 "High School Reinvention - Focus on Instruction"

I think it would be a good idea if we used **common discussion group techniques**

73% **1. Strongly Agree**

20% **2. Agree**

2% **3. Disagree**

4% **4. Strongly Disagree**


Open-ended questions to deepen understanding
... "What's going on here?"
What do you see that makes you think so?"

- What might you do in a similar situation?
- What does this remind you of in your own life?
- If you were telling this story, how might you end it?
- What do you think would happen if... ?

Writing a summary matched to text structure

Recognizing **how a piece of writing is organized** helps to summarize it

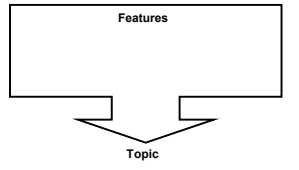
Students may need to first map out the main points in a rough outline so that they can see the relationships



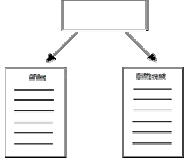
Does your school use common strategies to map text structure?

| Pattern | Description | Cue Words |
|----------------------|--|--|
| Description | Describes a topic by listing characteristics, features, and examples | for example, characteristics are |
| Comparison | Explains how two or more things are alike and/or how they are different. | different; in contrast; alike; same as; on the other hand |
| Cause and Effect | Lists one or more causes and the resulting effect or effects. | reasons why; if...then; as a result; therefore; because |
| Problem and Solution | States a problem and lists one or more solutions for the problem. | problem is; dilemma is; puzzle is solved; question... answer |
| Sequence | Lists items or events in numerical or chronological order. | first, second, third; next; then; finally |

Description: listing characteristics, features, and examples

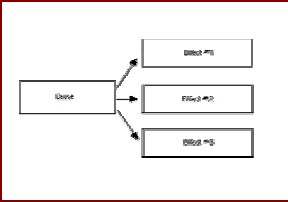


Comparison: how two or more things are alike or different

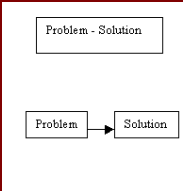


Model Schools '06 "High School Reinvention - Focus on Instruction"

Cause and Effect: one or more causes and the resulting effect or effects



Problem and Solution: States a problem and lists one or more solutions for the problem



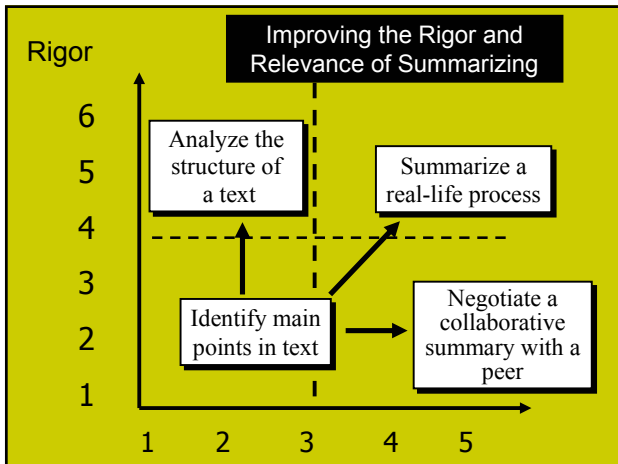
I think it would be a good idea if we used **common text structure maps**

66% **1. Strongly Agree**

29% **2. Agree**

0% **3. Disagree**

5% **4. Strongly Disagree**



Strategy #3:
Comparing
assessing
similarities and
differences



Research shows student use of comparison skills results in a 45 - percentile gain in student performance.
Classroom Instruction that Works, ASCD, 2001

Case 1:
Teacher lectures on the essential characteristics of mammals

Case 2:
Teacher lectures and then students design a comparison of the essential characteristics of mammals

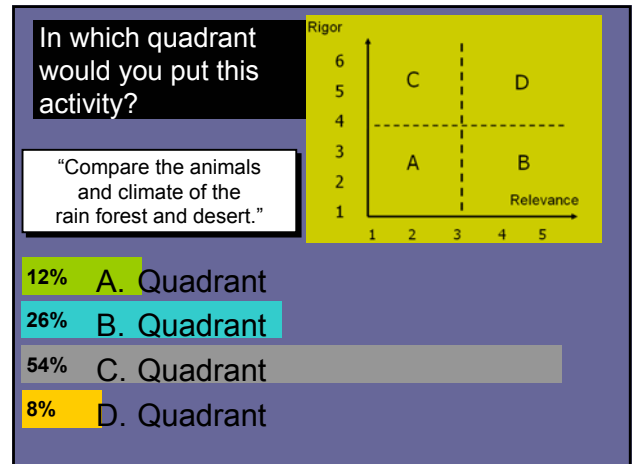
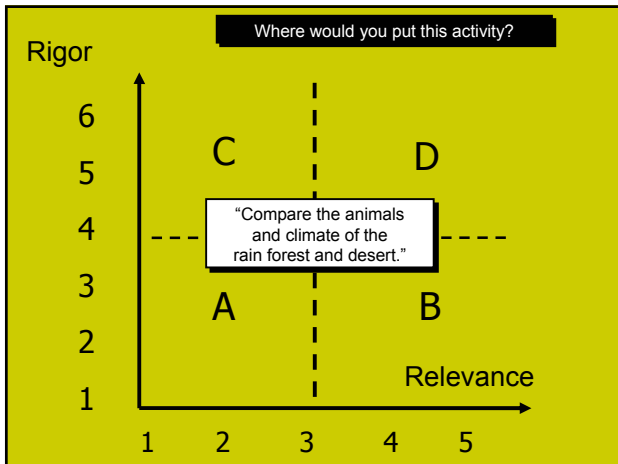
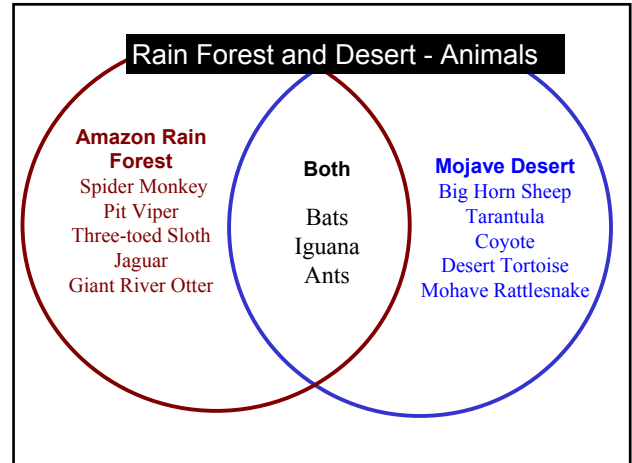
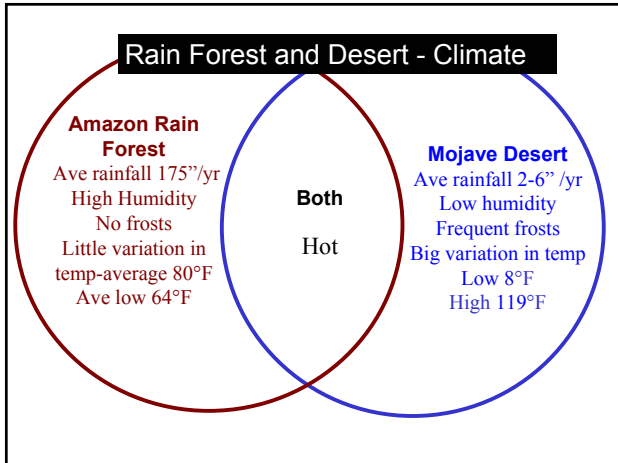
+ 45% gain in content mastery

"Compare the animals and climate of the rain forest and desert."

| Amazon Rain Forest | Mohave Desert |
|---------------------------------------|-----------------------|
| Ave rainfall 175"/yr High Humidity | Ave rainfall 2-6"/yr |
| No frosts | Low humidity |
| Little variation in temp-average 80°F | Frequent frosts |
| Ave low 64°F | Big variation in temp |
| Hot | Low 8°F |
| Spider Monkey | High 119°F |
| Pit Viper | Bats |
| Three-toed Sloth | Iguana |
| Jaguar | Ants |
| Giant River Otter | Big Horn Sheep |
| Bats | Tarantula |
| Iguana | Coyote |
| Ants | Desert Tortoise |
| | Mohave Rattlesnake |

Classroom Instruction that Works, ASCD

Model Schools '06 "High School Reinvention - Focus on Instruction"



But who is doing the thinking in this exercise?
"Compare the animals and climate of the rain forest and desert."

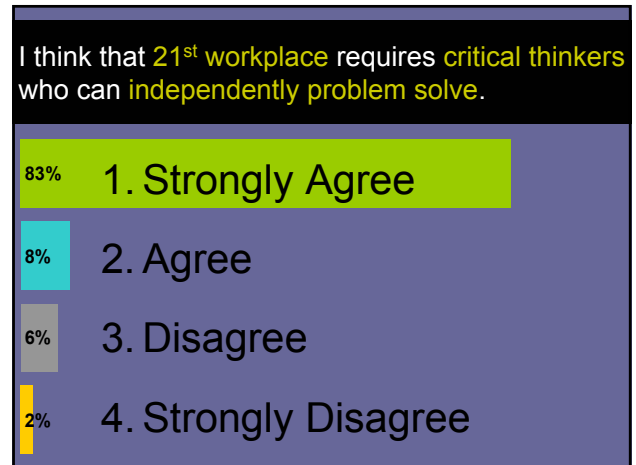
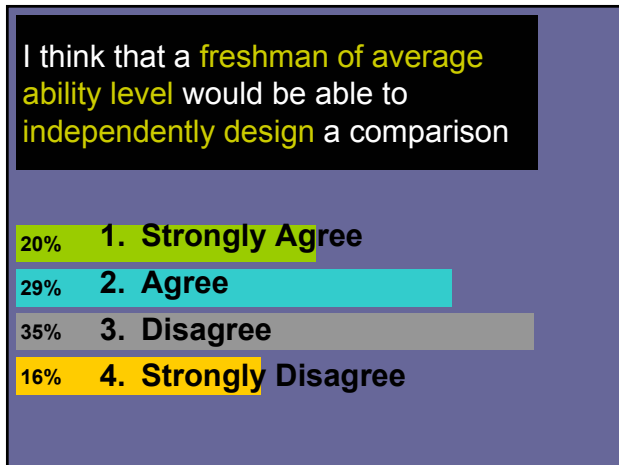
- Did students select **the information** and **decide on the categories**?
- Did they **design the graphic organizer**?
- Is it **really an exercise in memorizing and repeating** the appropriate (complex) information that others have told the student?

What's the point of the comparison?
 What does it enable us to do or see?

How would students independently compare regions?

- Select two geographic regions of the world
- Develop a model to compare the regions
- Select at least two factors to compare
- Develop a graphic organizer to display your comparison.


Model Schools '06 "High School Reinvention - Focus on Instruction"



Do you give students an opportunity to **develop their own models** for comparison?


- They could **select items to compare** from a teacher-produced list.
- They could independently decide **what to compare**.
- Can include some combination of **selecting both the items and / or characteristics**.
 - Of what use is the comparison
 - What does it enable us to do or see?

Is Tuesday's school lunch better than Wednesday's?



Design comparison
Select characteristics
Rating system


Move from Comparing to Classifying



- Comparing** is the process of **identifying similarities and differences** between or among things or ideas (technically contrasting is looking for differences.)
- Classifying** is the process of **grouping things** that are **alike into categories** on the basis of the characteristics

Comparison depends on classification. The student may not be aware of the connection, because the teacher did the classifying in advance, leaving only the comparing for the student.

It's like comparing **apples** and **oranges**



Who determines the categories and "rules" for membership?

Model Schools '06 "High School Reinvention - Focus on Instruction"

Can your students move from comparing to **designing classification systems**?

- We typically ask students to **take someone else's classification system** and apply it.
- We rarely ask students to **generate a classification system of their own**.
- Creating categories gives them a chance to **assert their intellectual independence**.
 - Of what use is the classification system?
 - What does it enable us to do or see?

Rigor and relevance in practice:
Student-designed classifying exercise

1. **What do I want to classify?**
2. **What things are alike** that I can put into a group?
3. **Does everything fit** into a group now?
4. Would it be better to **split up any of the groups** or put any groups **together**?

9th Grade Academy – A small learning community that works.



"Boost student achievement with rigor, relevance and literacy strategies for academic success. This workshop traces the success of the ninth grade academy at East Irondequoit CSD, an inner-ring suburb of Rochester NY.

High standards, parent partnerships and assessment driven instruction are helping teachers of all disciplines support their subject area while building student literacy skills."

Wednesday - 1 Session

www.edteck.com/slc

small learning communities **THAT WORK**

See what happens when teachers and administrators create small learning communities based on a common vision. It's more than new classes, structures or programs - it's about quality instruction and:

Engaging the entire school community in thinking critically about student achievement. A consistent focus on common instructional strategies in a student centered classroom. A professional development program that models rigorous and relevant instruction.

Peter Pappas
DESIGNS FOR LEARNING
I served for over 30 years as teacher, K-12 coordinator, Assistant Superintendent for Instruction, and consultant.

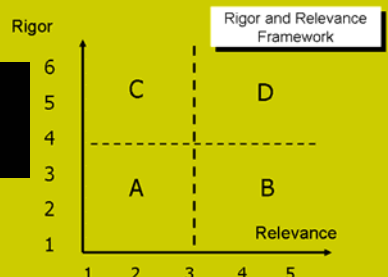
The Ninth Grade Academy
Eastridge High School
East Irondequoit CSD
Rochester NY 14609

I've proved to have been part of the creation of two small learning communities, the Ninth Grade Academy and the Summer Prep School. In each case we first assembled a team of educators to bring a common vision of teaching and learning. These schools were organized to accomplish this vision.

— Peter Pappas

More resources from Peter Pappas
©2006
Center for Leadership in Education
About Peter Pappas

Focus on Instruction



All teachers trained in:
Rigor and Relevance
Learning and Content Reading Strategies
(also trained our school board and parents)

A shared vision of teaching and learning

NGA teacher:

"Our students are **successful** because we use **learning strategies** that put them in **charge of their own learning**."



Model Schools '06 "High School Reinvention - Focus on Instruction"

NGA teacher:

"We're no different than most teachers, but **because of the support - we're outstanding teachers.**"

I'm so grateful for the opportunity I've had to teach in the Academy for the last two years. I'm seeing that **it can happen.**

This is the **best experience I could have hoped for.**"

Teachers and students talk about a shared vision of teaching and learning.



Model Schools updates and data reports on my blog

Please leave the responders on your table ~Thanks!



Break Time!

Kennesaw Mountain HS
Susan Gunderman
Mimi Dyer
Lenora Nyeste

