The
Thoughtful Classroom

An Introduction to the
C.R.A.F.T. of Thoughtful
Leading, Learning, and Teaching

Presented by
Tr. Harvey F. Silver Ed., D.
Thomas Dewing
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Overview

What distinguishes successful schools from schools that are less successful?  
What can I do to enhance learning and raise achievement at my school?

Have you ever wondered about the answers to these questions?  If so, you are not alone. Teachers and administrators have been asking us these questions for years – and we will share our answers with you in this workshop.  In today’s session, we will discuss the factors that distinguish highly successful schools from those that are less successful.  We will also explain how we used this information to help us design an easy to use, action-oriented plan that you can use to raise achievement in your own school – a plan that blends the wisdom of classroom teachers with the findings of educational researchers in order to make a real difference in student learning.

What Distinguishes Successful Schools From Less Successful Ones?

Now think about this:  What distinguishes successful schools from less successful ones?

Generate TWO ideas in the space below and then stop writing.

1. 

2. 

Use the “Give One Get One” teaching tool described below to generate three more ideas.

3. 

4. 

5. 

Here are the basic steps of “Give One Get One”:

1. Generate two ideas.  (You’ve already done this part!)
2. Find a partner.  GIVE ONE of your ideas to your partner.  GET ONE of your partner’s ideas and add it to your list.  If you and your partner have the same ideas, work together to generate a new idea and add it to your lists.
3. Find a new partner.  Give one, get one.
4. Repeat steps 2 & 3 until you have a total of five ideas.
Why Partner With The Thoughtful Classroom Program?

“The Thoughtful Classroom Program’s great power lies in its ability to explain 35 years of research in a way that is immediately accessible to teachers.”

Robert J. Marzano, Author Classroom Instruction That Works, and What Works in Schools

If you want proof, just take a look at the impact that using our *Thoughtful Classroom Professional Learning Portfolios* and Learning Clubs have had on the performance of ten school districts in Kentucky:

![Accountability Gain From 2004-2006](image)

- Nine of the ten districts participating in The Thoughtful Classroom initiative exceeded the state accountability index of 2.8.
- The average accountability index of the nine school districts that exceeded the state’s index was 5.0 (almost twice the growth of the state average of 2.8.)
- Six of the ten districts exceeded the state accountability index by more than 50%: 4.6, 4.7, 5.2, 5.3, 6.7, 7.2.
- GRREC districts not participating in The Thoughtful Classroom initiative gained on average, slightly more than the state’s 2.8, but significantly less than the participating districts in The Thoughtful Classroom initiative.
- The state’s number one and number three districts showing the greatest gains were participants in The Thoughtful Classroom initiative. In the following year the eleventh and twelfth districts showing the greatest gains in the state were also Thoughtful Classroom participants.
Successful Schools “Row as One”

It has been said that great schools and organizations “row as one.” These institutions develop a strong sense of purpose and a shared identity among staff. In other words, successful schools and organizations have a strong sense of “we.”

Lickona & Davidson (2005)

In order to develop a clear identity among staff members, the most successful schools address the four questions. Why do they exist? What must they do or become to accomplish their purpose? How they will behave to achieve their vision? How they will determine their progress? The answers to these four questions are a school’s mission, vision, values, and goals.

The mission of The Thoughtful Classroom is:

The vision of The Thoughtful Classroom is:

The values of The Thoughtful Classroom are:

The goals of The Thoughtful Classroom are:
Five Principles of The Thoughtful Classroom

From this double life of the word “thoughtful,” we extract five principles of The Thoughtful Classroom:

*Thought is natural.* Everyone thinks all the time, every day, every minute of the day. Thought is as natural to humans as breathing.

*Thought is purposeful and purpose seeking.* As people, we think our way through and around all sorts of problems in order to achieve specific ends, goals, and purposes. But things being what they are, sometimes our goals aren’t so clear—and so we need to think in order to find or discover a worthwhile purpose to pursue.

*Thought is strategic.* People use the disciplines to shape their own thoughts and thoughts of others into forms and formats that make thinking more effective in achieving that culture’s goals and values.

*Thought is a dialogue with self and others.* Our thoughts take form and become powerful through processes of internal and external dialogue.

*Thought is personal and a matter of style.* Everyone thinks differently. In the same way that we all speak our own version of a common language, we all create our own unique patterns of thought out of our personal history, experiences, strengths, weaknesses, interests, and habits of attention.

These five principles are at the heart of our work together; they unite us around our common commitments to students, and they can help us improve our vision. Using these simple but deep principles to guide us, we can get a clear picture of what we want to see and hear in our classroom. What follows is the natural extension of these five principles. Accompanying each principle is a set of indicators. These indicators serve two purposes. First, they show the different ways teachers can operationalize these principles, or turn them into classroom practice. Second, they identify typical student behaviors that are the result of their teachers’ commitment to each principle.
Successful Schools are Good Learners

Teachers and administrators who work in successful schools recognize that there is not a 'magic bullet' capable of raising student achievement overnight. They know that it is their capacity and commitment to practice the C.R.A.F.T. of teaching, learning, and leading - to Collaborate, Reflect, Adapt, and Focus - that is the key to bringing about Thoughtful teaching, learning, and leadership for all.

“What’s My Line?”

Directions

1. Turn the page and draw a line that connects point A to point B. The line must make a minimum of seven turns/bends in between point A and point B (see example to right).

   IMPORTANT: DO NOT LET YOUR PARTNER SEE YOUR LINE!

2. Decide who will be the first “teacher” and who will be the first “learner.”
3. Have the learner pick up his writing utensil, close his eyes, and keep them closed through the remainder of the activity.
4. The teacher should put his paper in front of the learner and place the learner’s hand on the starting point (point A). The teacher must now figure out a way to guide the learner along the correct path from point A to point B.

There’s only one restriction...ONCE THE TEACHER PLACES THE LEARNER’S HAND ON THE STARTING POINT, HE CANNOT TOUCH THE LEARNER’S HAND AGAIN!!

*The goal is to have the learner trace the exact same path from point A to point B that the teacher did. In other words, the learner’s line and the teacher’s line should overlap.

5. When you finish, take a minute to reflect on your experience as a teacher or learner— What happened? How did you feel? What did you learn? Make some notes in the Initial Reflection Box and then share your thoughts with your partner.
“What’s My Line?”

Point A

Point B
Initial Reflection Box

As a teacher, I...

As a learner, I...

Teacher Collaboration Box

What might we want to do differently this time? And why?
Educators in successful schools realize that meaningful change does not happen overnight. They understand the necessity of constantly refining and improving their CRAFT in order to achieve optimal results, and they are committed to investing the time and effort that it takes to successfully practice the CRAFT of Thoughtful teaching.

<table>
<thead>
<tr>
<th>COLLABORATION</th>
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<th>THOUGHTFUL TEACHING</th>
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*The statements on this chart are adapted from our three-part CRAFT of Leadership Inventory (Silver & Perini, 2007).
Successful School Are Able to Close the “Knowing-Doing Gap”

The degree to which we are able to implement best practices in the classroom in a thoughtful, meaningful way determines how well our school and our students perform.

Pfeffer and Sutton

Here are three things we know about improving teaching and learning:

1) High quality instruction leads invariably to higher levels of student achievement. Most educational researchers have concluded that the quality of classroom instruction is the single greatest determinant of student success.
2) High quality instruction is replicable; there are specific, research-based strategies proven to raise student achievement—and that all teachers can master with time and support.
3) Schools that function as effective professional learning communities see “big, often immediate dividends in student learning and professional morale in almost any setting” (Schmoker, 2005, p. xii).

Decades-worth of research by Bruce Joyce and Beverly Showers have made it clear that most of the information that teachers acquire during professional development sessions does not get used. In fact, for the majority of professional development initiatives, less than ten percent of what teachers learn in workshops and training sessions ends up making it back to the classroom (Joyce & Showers, 2002).

I bet you that pesky knowing-doing gap is to blame for the problem!
What Does it Take to Bridge the “Knowing-Doing Gap”?

Use the bar graph on below (Joyce & Showers, 2002) to help you answer this question.

![Graph showing behaviors that influence the knowing-doing gap.]

**Behaviors That Influence the Knowing-Doing Gap**

- (+) Workshop
- (+) Modeling
- (+) Practice & Planning Time
- (+) Peer Coaching & Feedback
- (+) Analyzing Student Work
- (+) Regularly Meeting With a Learning Club

Percentage of information that gets put into practice
What instructional strategies enable the greatest gains in student performance?

For many years, educational researchers have been interested in finding out whether teaching strategies were actually having a positive impact on student achievement—and if so, which ones. One of the most extensive and influential of these studies was initiated by the renowned educational researcher Robert Marzano, who used meta-analysis to identify the types of instructional strategies that have the highest probabilities of enhancing achievement for students of all ages, across all content-areas. Marzano and his team presented their findings in the aptly titled and best-selling book *Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement* (Marzano, Pickering, & Pollock, 2001).

In *Classroom Instruction That Works*, Marzano’ team describes the nine categories of instructional strategies that affected the greatest gains in student achievement (across all grade levels, in all subjects). These nine categories, which we refer to as “The Marzano Nine,” are listed below.

Which three categories of instructional practices/strategies do you think would have the greatest impact on student achievement? Mark your choices with a “X”.

### Categories of Instructional Practices and & Strategies*

<table>
<thead>
<tr>
<th></th>
<th>Ranking</th>
<th>% Gain</th>
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<tbody>
<tr>
<td>Generating and Testing Hypotheses</td>
<td></td>
<td></td>
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<tr>
<td>Summarizing and Note-taking</td>
<td></td>
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<tr>
<td>Identifying Similarities and Differences</td>
<td></td>
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<tr>
<td>Questions, Cues, and Advance Organizers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reinforcing Effort and Providing Recognition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperative Learning</td>
<td></td>
<td></td>
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<tr>
<td>Nonlinguistic Representation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setting Objectives and Providing Feedback</td>
<td></td>
<td></td>
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<tr>
<td>Homework and Practice</td>
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</tbody>
</table>

*We acknowledge the use of nine strategies from Marzano, Pickering, and Pollock’s Classroom Instruction That Works Copyright © 2001 Mid-continent Research for Education and Learning (McREL). Adapted by permission of McREL. 4601 DTC Boulevard, Suite 500, Denver, Colorado 80237. Phone: 303.337.0990. Web: www.mcrel.org/topics/products/19/.*

The next two pages come from *Compare and Contrast: How Comparative Thinking Strengthens Student Learning*, one of the titles in the Professional Learning Portfolio Series published by Thoughtful Education Press.
Compare & Contrast
How Comparative Thinking Strengthens Student Learning
TEACHER PLANNING AND IMPLEMENTATION GUIDE

Thoughtful Classroom
Making Students as Important as Standards
LEARNING FROM STUDENT WORK

Compare & Contrast lessons ask students to create descriptions, comparisons, conclusions, and responses to application tasks. Examining these samples of student work will provide insight into the students’ understanding of content, their thinking and learning processes, and their approach to creating high-quality products.

In preparation for a museum writing for your learning club or teacher team, you and your colleagues should collect three examples of student work from a Compare & Contrast lesson. At least one of these products should be from a student whose performance represents the middle range, and one from a student who struggles. As you and your colleagues examine the student work together, ask yourself these questions:

CONTENT:
What did the student work in comparison suggest about students’ grasp of key ideas and details? What parts of the content are easily in their grasp? What claims and details are shifting through the content?

PROCESS:
What did this work suggest about how your students describe, compare, and synthesize? How do they think about similarities and differences you discover in the student work? How well are they communicating the ideas they have about the content?

PRODUCT:
What similarities and differences do you notice in the quality of the student work? How well are they presenting ideas? What does this work suggest about how your students describe, compare, and synthesize?

NEXT STEPS:
Taking your thoughts about your students’ work into account:

CONTENT
- What have I learned about my students’ grasp of ideas and details in the content area? Where is the content area difficult for my students? What parts of the content are easily in their grasp? What claims and details are shifting through the content?

PRODUCT
- What similarities and differences do I notice in the quality of the student work? How well are they presenting ideas? What does this work suggest about how my students describe, compare, and synthesize?

PROCESS
- What have I learned about my students’ ability to describe, compare, and synthesize? How well are they communicating the ideas they have about the content?

What similarities and differences do you notice in the quality of the student work? How well are they communicating the ideas they have about the content?

Product – What have I learned about my students’ ability to communicate? What motivates their writing?

Process – What have I learned about my students’ abilities to describe, compare, and synthesize?

Content – What have I learned about my students’ grasp of ideas and details in the content area? Where is the content area difficult for my students? What parts of the content are easily in their grasp? What claims and details are shifting through the content?

Comparison, Contrast, and Reasoning

Compare & Contrast is an important thinking strategy that helps students develop writing skills by providing tools to help them write with better organization and greater clarity.

THOUGHTFUL CLASSROOM PORTFOLIO SERIES

Compare & Contrast

How Comparative Thinking Strengthens Student Learning

TEACHER PLANNING AND IMPLEMENTATION GUIDE

THE 4 PHASES OF A THOUGHTFUL COMPARE & CONTRAST LESSON

Guide your students through the following phases. Regular practice will lead them to independent use of the Compare & Contrast strategy.

Describe
- Identify your purpose: describe each item separately using criteria to keep yourself focused

Compare
- Use a diagram to record the similarities and differences you discover

Conclude
- Discuss what you have learned from your comparisons

Page 4

Where am I now?

I know what Compare & Contrast is and can describe what it looks like in the classroom.

I understand Compare & Contrast and can explain it to others.

I have planned several Compare & Contrast lessons, used those in my classroom, and evaluated my colleagues on their effects on my students.

My students have a solid understanding of Compare & Contrast and can use these thinking skills involved in the strategy to other situations.

I am not in touch with people near or in my Compare & Contrast.

WHAT IS COMPARE & CONTRAST?

Compare & Contrast is an important thinking strategy that helps students develop their writing skills by providing tools to help them write with better organization and greater clarity.

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Goal #1

Describe

Higher-order Thinking

Compare & Contrast acts as a practical and easy-to-use introduction to higher-order thinking.

Goal #3

Comparisons

Compare & Contrast improves comprehension by heightening awareness of similarities, contrasting important details, and taking derived ideas more constructively.

Goal #4

Decision Making

Compare & Contrast is the most personal form of comparison, engaging students in creative comparison, active participation, and decision making.

Goal #2

Classification

Compare & Contrast is the most personal form of comparison, engaging students in creative comparison, active participation, and decision making.

Goal #2

Classification

Compare & Contrast is an important thinking strategy that helps students develop writing skills by providing tools to help them write with better organization and greater clarity.

New England Associates

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Compare & Contrast lessons ask students to create descriptions, comparisons, conclusions, and responses to application tasks. Examining these samples of student work will provide insight into the students’ understanding of context, their thinking and learning processes, and their approach to creating high-quality products.

In preparation for a self-evaluation of your teaching, either in a “think-a-room,” or with your colleagues, select three samples of student work from a Compare & Contrast lesson. At least one of these samples should be from a student who represents the high range, one from a student who represents the middle range, and one from a student who struggles. As you and your colleagues examine these samples, ask yourself these questions:

**CONTENT**
- Which areas of the content are easily to their grasp? What parts of the current are slipping through the cracks?
- What similarities and differences do you notice in the quality of the student work? How well are they communicating this? What areas are they excelling in? What areas are they struggling with?

**PROCESS**
- What strategies or techniques do you notice students using to organize their thinking and learning?
- How are they using criteria to organize their ideas and details?
- What does the student work in comparison suggest about students’ grasp of key ideas and concepts?

**PRODUCT**
- How do they use criteria? Do they note and make use of both ideas and details?
- What does this work suggest about how your students describe, compare, and synthesize?
- What similarities and differences do you notice in the quality of the student work?
- What areas are they excelling in? What areas are they struggling with?
- What parts of the content are slipping through the cracks?

**NEXT STEPS**
- What will you do next to make use of your learning and insights?
- What do you notice in the quality of the student work? How well are they communicating this? What areas are they excelling in? What areas are they struggling with?
- What areas are they excelling in? What areas are they struggling with?
- What parts of the content are slipping through the cracks?
- What similarities and differences do you notice in the quality of the student work? How well are they communicating this? What areas are they excelling in? What areas are they struggling with?
- What will you do next to make use of your learning and insights?

**WHERE AM I NOW?**

**Goal #1: Knowledge**
- How will you evaluate student thinking on analyzing parts of ideas, the Compare & Contrast strategy strengthens students’ understanding and awareness of parts and whole. Students are introduced to higher-order thinking.

**Goal #2: Higher-Order Thinking**
- Compare & Contrast improves comprehension by examining ideas, understanding important details, and making informed ideas more concrete.

**Goal #3: Decision Making**
- Students, used in my classroom,银斯顿斯strong associates • www.thoughtfuled.com

**Goal #4: Writing in the Content Areas**

**WORKSHEET 1: WHAT IS COMPARE & CONTRAST?**

**WHAT IS COMPARE & CONTRAST?**

The Compare strategy helps students strengthen their writing skills by providing tools to help them write with better organization and greater clarity.

**Goal #4: Writing in the Content Areas**
- The Compare strategy helps students strengthen their writing skills by providing tools to help them write with better organization and greater clarity.

**WORKSHEET 1: WHAT IS COMPARE & CONTRAST?**

**WHAT IS COMPARE & CONTRAST?**

This portfolio focuses on Compare & Contrast, a strategy unique in its approach to build student memories, eliminate confusions, and highlight critical similarities and differences. Compare & Contrast strategies are provided in the American context, accompanied by this portfolio.

**Goal #4: Writing in the Content Areas**
- The Compare strategy helps students strengthen their writing skills by providing tools to help them write with better organization and greater clarity.

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**Goal #4: Writing in the Content Areas**
- The Compare strategy helps students strengthen their writing skills by providing tools to help them write with better organization and greater clarity.

**What can the Compare & Contrast strategy do for you and your students?**

**Goal #1: Knowledge**
- How will you evaluate student thinking on analyzing parts of ideas, the Compare & Contrast strategy strengthens students’ understanding and awareness of parts and whole. Students are introduced to higher-order thinking.

**Goal #2: Higher-Order Thinking**
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- The Compare strategy helps students strengthen their writing skills by providing tools to help them write with better organization and greater clarity.
A Potpourri of Classroom Comparisons

The next few pages show the kinds of work students create while engaged in Compare and Contrast lessons. These student work samples span a wide range of content areas and grade levels. What evidence of good thinking do you see in these samples?

Compare and Contrast Potpourri

A second-grader analyzes the structure of two fables.

<table>
<thead>
<tr>
<th>&quot;The Tortoise and the Hare&quot;</th>
<th>Criteria</th>
<th>&quot;The Tortoise and the Antelope&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A tortoise</strong></td>
<td>Characters</td>
<td><strong>A tortoise</strong></td>
</tr>
<tr>
<td><strong>A hare</strong></td>
<td></td>
<td>Antelope</td>
</tr>
<tr>
<td>Because the</td>
<td>Why they decide to race</td>
<td>Because they can go faster</td>
</tr>
<tr>
<td>hare makes fun of the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tortoise</td>
<td></td>
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</tr>
</tbody>
</table>
| The hare                   | How the tortoise wins | The tortoise and some friends
| goes to sleep by accident  |           | trap the antelope               |
| "Slow and Steady wins the race" | Lesson | "Teamwork works!"               |

A first-grader uses a magnifying glass to identify the critical attributes of coins.

- **Name of Coin**: penny, nickel, dime, quarter
- **Color**: copper, silver, silver, silver
- **Shape**: circle, circle, circle, circle
- **Size**: medium, large, small, largest
- **How Edges Feel**: smooth, smooth, bumpy, bumpy
- **President on Front**: Lincoln, Jefferson, Truman, Washington
- **Picture on Back of Regular Coin**: building, building, animal, flag
- **Picture on Back of No Coin**: head, tail, head, animal
- **Value**: 1¢, 5¢, 10¢, 25¢

A group of middle school students uses words and images to distinguish reptiles and dinosaurs.
## Compare and Contrast Potpourri (continued)

A high school student creates a “T-Shirt Organizer” to identify the similarities and differences between anaerobic and aerobic exercise.

<table>
<thead>
<tr>
<th>ANAEROBIC</th>
<th>AEROBIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sporadic, intermittent exercise for short, intense activity.</td>
<td>Continuous, steady-state exercise for long periods.</td>
</tr>
<tr>
<td>Uses ATP-CP breakdown.</td>
<td>Uses carbohydrate and fat breakdown.</td>
</tr>
<tr>
<td>Energy from ATP and CP.</td>
<td>Energy from aerobic respiration.</td>
</tr>
<tr>
<td>Increases power and speed, improves muscular strength and endurance.</td>
<td>Increases stamina and cardiovascular health.</td>
</tr>
</tbody>
</table>

**Similarities**
- Both burn calories.
- Both improve body function and lead to a healthy body.
- Both produce energy through glycolysis.
- Almost all types of sports and training activities involve both types of exercise.

A middle school student creates a “Top Hat Organizer” to summarize and review critical similarities and differences between volume and surface area.

<table>
<thead>
<tr>
<th>Volume</th>
<th>Surface Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Volume</strong></td>
<td>Volume is the measurement of space a three-dimensional figure occupies. Always involves multiplying area of the base by the height of the figure. Expressed in cubic units.</td>
</tr>
<tr>
<td><strong>Surface Area</strong></td>
<td>Surface area is the sum of all the surfaces of a three-dimensional figure. Always involves adding up the areas of the individual surfaces. Expressed in square units.</td>
</tr>
<tr>
<td><strong>Similarities</strong></td>
<td>Both apply to three-dimensional shapes. Both require you to know how to find the two-dimensional area.</td>
</tr>
</tbody>
</table>

A middle school student compares the educational philosophies of Booker T. Washington and W. E. B. Du Bois on a “Y Organizer.”

**Booker T. Washington**
- Believed in education.
- Believed in developing practical skills.
- Emphasized the need for vocational training.
- Believed in the separation of races.

**W. E. B. Du Bois**
- Believed in education.
- Believed in the development of African-American culture.
- Emphasized the importance of higher education.
- Believed in the integration of races.

**Similairities**
- Both were prominent educators.
- Both were concerned about the lack of educational opportunities for blacks.
- Both believed education was the key way to achieve equality.

A high school student compares two literary movements: Naturalism and Realism.

<table>
<thead>
<tr>
<th>REALISM</th>
<th>NATURALISM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belief that human nature is limited by natural factors.</td>
<td>Belief that human nature is limited by environmental factors.</td>
</tr>
<tr>
<td>Great respect for natural law.</td>
<td>Emphasis on the struggle of human nature against the environment.</td>
</tr>
<tr>
<td>More emphasis on humanity.</td>
<td>More emphasis on the individual.</td>
</tr>
<tr>
<td>Great stress on race and class; more moral condescension.</td>
<td>More stress on the individual’s environment; more moral realism.</td>
</tr>
<tr>
<td>The “Great Unifier”</td>
<td>The “Great Monkey”</td>
</tr>
</tbody>
</table>

**Both**
- Both contributed greatly to American literature.
- Both emphasized the importance of education and opportunity.
The Thoughtful Classroom Portfolio Series: A Tool For Bridging the Gap

Our Thoughtful Classroom Portfolios (Strong, Silver, & Perini, 2000-2008), which we developed in collaboration with teachers, administrators, and trainers, make it easier than ever before to bring research-based instructional strategies into your classroom or school. One of the reasons that these portfolios are so effective is because the behaviors that help teachers bridge the knowing-doing gap are “built right in.”

Portfolios also serve to focus educators’ attention on research-based strategies or practices that are proven to make a difference in student achievement — instructional ‘best bets’ like Reading for Meaning, Notemaking and Summarizing, Comparative Thinking, and Vocabulary Building.

Each Thoughtful Classroom Portfolio consists of 3 parts:

The portfolio itself (a six-sided file-folder), which serves both as a handy reference tool during lesson planning and as a convenient place to store student work.

The comprehensive Resource Guide, which contains worksheets, templates, examples, and activities that can be used during teacher training sessions.

A poster that teachers can use to present and explain the strategy to their students.
While the strategies in the portfolios are thoroughly explained and easy to understand, it will take commitment and time to successfully bring these strategies into your classroom. Truly mastering a new strategy typically takes at least twenty hours.

The good news is that you do not have to put in 20 hours of training in a row! In fact, we encourage you to bring each new strategy into the classroom slowly. Move through each of the four implementation phases below at your own pace.

**Phase 1: Introducing the strategy**
Learn what the strategy is and “play with it” a bit – i.e. try it out.

**Phase 2: Planning a lesson**
Try planning a lesson using the strategy. Invite your colleagues to observe your lesson (and/or lesson plans) and give you feedback. Do the same for them.

**Phase 3: Evaluating the lesson**
Evaluate your ability to design a successful lesson using this strategy. Consider your own feelings as well as the feedback that you received from your colleagues. The purpose of this evaluation is to help you refine and improve your practice.

**Phase 4: Analyzing student work**
Collect and analyze student work in order to determine the impact of using this strategy on student performance and to see how well you were able to implement the strategy in your classroom.
Successful Schools Make Students as Important as Standards

“This country will not be a good place for any of us to live in unless we make it a good place for all of us to live in.”

Theodore Roosevelt

As educators, we can see the signs of society’s commitment to the ideal of fairness all around us. Everything from the landmark Brown v. Board of Education ruling in 1954 to the more recent Individuals with Disabilities Education Act (IDEA), Response to Intervention (RTI) model, and No Child Left Behind legislation (NCLB) reflect our desire to help all students fulfill their potential. As educators, we are also acutely aware of the difficulties inherent in making the goal of getting all students to achieve at high levels a reality; no one knows better than we do how challenging it can be to achieve this kind of uniformity given the diverse needs, abilities, and talents of our students.

If we hope to raise test scores across the board, close the achievement gap, and decrease the dropout rate, we need an instructional model that takes student diversity into account—a model that recognizes and utilizes the unique styles and strengths of our students to improve teaching and learning in the classroom. Our learning style model, which is both research-based and classroom-tested, is just such a model.

The Importance of Balancing Students and Standards

The recent movement to create a more standards-based, assessment-driven educational system in this country has prompted many schools to shift the focus of curriculum design and classroom instruction significantly. In this section, we will examine the ways that this shift is affecting teaching and learning in the classroom. Before we begin our discussion, though, we’d like you to complete the “mirroring” activity on the next page.
**Mirroring Activity**

1. Select a partner. Once you find someone to work with, do not say anything else. There is absolutely **No Talking Allowed** during this activity!

2. Stand up and face your partner. Raise **Both** of your hands to shoulder height and “mirror” the position of your partner’s hands, but don’t let your hands touch – keep some space between your hands and your partner’s hands.

3. Once your hands are in position, you and your partner will need to keep them moving for the next ninety seconds. The goal is to keep your hands moving **In Unison** for the entire time without saying anything to your partner.

**Reflect on the experience...**

What did you pay more attention to during this activity:

- [ ] Keeping your hands mirrored?
- [ ] The person who you were working with?

In facilitating this activity with hundreds of teachers across the country, we find that most workshop participants are so focused on keeping their hands mirrored that they lose sight of their partners.

**Why is this relevant to our discussion?**

The pressure of having to cover content and raise achievement scores is causing many of today’s educators to lose sight of their students in the same way that the pressure of having to keep your hands mirrored caused many of you to lose sight of your partner. In an attempt to help students achieve at higher levels, educators are increasingly paying more attention to standards documents and test data than they are to the individual needs, passions, personalities, and styles of their students.

**Is this shift in focus really a problem?** In other words, given all that today’s teachers are expected to accomplish, can they really afford to spend valuable classroom time learning about the needs, passions, personalities, and styles of their students? If teachers did invest more time in learning about their students, would the investment really pay off?

Take a minute to think about these questions and then record your thoughts in the box at the top of the next page.
Take a minute or two to reflect on your current practice. Do you spend class time finding out who your students are as individuals? If so, respond to the questions below.

1) *How do you collect information about your students as individuals?*

2) *What kind(s) of information do you collect?*

3) *How do you use the information that you collect?*
Hand of Knowledge” is a simple technique that some teachers use to gain insight into who their students are and what makes them tick. Students are given a picture of a hand and asked to record six bits of personal information about themselves on the hand as follows:

- **Pinky finger**  When you have free time, what do you do for fun?
- **Ring finger**  What is something that you’re really good at?
- **Middle finger**  When school is hard, what makes it hard?
- **Index finger**  Think about something interesting that you learned outside of school. What is it and how did you learn it?
- **Thumb**  What is a dream that you have for your future?
- **Palm**  What word or phrase best characterizes you as a learner?

⇒ Give the Hand of Knowledge technique a try. Record your responses to the questions above on the blank Hand of Knowledge organizer on the next page. **NOTE:** Because the Hand of Knowledge questions were designed for students, you will need to modify them slightly before responding. Replace the “pinky finger question” above with: “When you were younger, what did you do for fun in your free time?” and replace the “middle finger question” with: “When learning something new is challenging, what makes it challenging?”
Hand of Knowledge Organizer
Share your completed organizer with a member of your Learning Club, and then have your partner share what he or she learned about you with the rest of your Learning Club. When you finish sharing, have each member of your Learning Club respond to the questions below and then discuss your thoughts as group.

_Pretend that your partner is a student in your class. How might having the information from your partner’s Hand of Knowledge help you teach more effectively?_

What might be the benefits of using Hand of Knowledge (or a similar activity) in your classroom? Generate as many ideas as you can. For example: How might it influence your understanding of your students’ diversity? What message might it send to your students? To their parents?
In his recent book, *Building Engaged Schools: Getting the Most Out of America’s Classrooms*, Gary Gordon reports on a Gallup Poll in which students were asked what helped them learn most. 53% of students gave credit to their teacher and the relationship, they developed with their teacher. Student responses generally fell into two categories:

- They liked the teacher. The teacher cared about and respected the students.
- The teacher’s style made it fun to learn.

The following two responses from the survey illustrate the emphasis students place on the teacher and student relationship:

“My teacher understood the way that I learned and worked. I was never criticized for my ideas or feelings, but I was met with questions and ideas that could change the way I looked at something.”

Jessica, 17, Waverly, IA

“My teacher always pushed us to our limits. I have never been pushed so hard in my life to achieve. She was very fun and really took time to know each one of us. She was there after school to help when we needed it.”

Brittany, 16, Phoenix, AZ

How can we address the diversity of our students in a way that is manageable and provides an equal opportunity for all students to achieve?

We would like to ask you a strange question about yourself. Are you more like...

<table>
<thead>
<tr>
<th>A paper clip?</th>
<th>A teddy bear?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A magnifying glass?</th>
<th>A Slinky?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The point of this little activity is to help us see that there are different ways—or styles—of learning. To level the playing field, we must address the diversity of student learning styles in a way that is both meaningful and manageable. There is no one best way to learn, nor is it best for teachers to teach students using just one style. A learning styles approach begins with a conversation about learning and is founded on an understanding of the key patterns of cognitive differences found in any classroom.

The problem is that many schools have a bias toward certain styles of instruction at the expense of other styles (Hanson & Dewing, 1991; Sternberg, 2006). But if we expect all our students to succeed then we’ll need to make sure our instructional approach incorporates all four styles.
Our model of learning styles is derived from the work of the great Swiss psychologist, Carl Gustav Jung. Jung was the first modern psychologist to address the problem of cognitive differences, and he did this by asking himself two questions:

*How are minds similar?*

and

*How are minds different?*

He answered the first question by noting that all minds are similar in that all minds perceive the world and make judgments about it.

He answered the second question by noting that minds perceived differently and made judgments differently. He saw that there were two unique ways of perceiving (sensing and intuition) and two unique ways of judging (thinking and feeling).

<table>
<thead>
<tr>
<th>perception functions</th>
<th>judgment functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>sensing</td>
<td>thinking</td>
</tr>
<tr>
<td>• Prefers action to wonder</td>
<td>• Prefers to make decisions based on logic</td>
</tr>
<tr>
<td>• Prefers a standard way of doing things</td>
<td>• Thinks things through before taking action</td>
</tr>
<tr>
<td>• Interested in activities that have immediate, practical use</td>
<td>• Decides independently of others</td>
</tr>
<tr>
<td>• Works steadily when given a realistic idea of how long a task will take</td>
<td>• Needs to be right and treated fairly</td>
</tr>
<tr>
<td>• More comfortable with concrete details than abstract ideas</td>
<td>• Responds to logic and reason</td>
</tr>
<tr>
<td></td>
<td>• Prefers to make decisions based on personal feelings</td>
</tr>
<tr>
<td></td>
<td>• Responds to feelings and is spontaneous</td>
</tr>
<tr>
<td></td>
<td>• Seeks approval of others before making a decision</td>
</tr>
<tr>
<td></td>
<td>• Needs to be liked and treated in a friendly way</td>
</tr>
<tr>
<td></td>
<td>• Responds to own likes and dislikes and other people's reactions</td>
</tr>
<tr>
<td>intuition</td>
<td>feeling</td>
</tr>
<tr>
<td>• Prefers wonder to action</td>
<td>• Prefers to make decisions based on logic</td>
</tr>
<tr>
<td>• Prefers own way of doing things</td>
<td>• Thinks things through before taking action</td>
</tr>
<tr>
<td>• Interested in activities that generate possibilities and go beyond what is</td>
<td>• Decides independently of others</td>
</tr>
<tr>
<td></td>
<td>• Needs to be right and treated fairly</td>
</tr>
<tr>
<td></td>
<td>• Responds to logic and reason</td>
</tr>
</tbody>
</table>

*Source: Learning Style Inventory for Adults. © 2007 Thoughtful Education Press. (p. 3)*

Put a check mark next to each behavior in the tables above that seem to describe you and how you learn and think best. In terms of perception, which is your preferred model, Sensing or Intuition? Why do you think so?
In terms of judging, which is your preferred model, Thinking or Feeling? Why do you think so?

Jung called these four ideas—Sensing (S), Intuition (N), Thinking (T), and Feeling (F)—functions. He saw them as unconscious aspects of our different dispositions to life and learning.

Later, researchers noticed that if you combined each perception function (Sensing or Intuition) with a judgment or decision-making function (Thinking or Feeling), you could see four distinct styles of learning:

<table>
<thead>
<tr>
<th>Sensing</th>
<th>Intuition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensing + Thinking = <em>Mastery Style</em></td>
<td>Intuition + Thinking = <em>Understanding Style</em></td>
</tr>
<tr>
<td>Sensing + Feeling = <em>Interpersonal Style</em></td>
<td>Intuition + Feeling = <em>Self-Expressive Style</em></td>
</tr>
</tbody>
</table>
The table below provides a brief overview of the four learning styles.

<table>
<thead>
<tr>
<th>Mastery</th>
<th>Interpersonal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emphasizes:</strong> Memory (knowing)</td>
<td><strong>Emphasizes:</strong> Connecting with people (social skills)</td>
</tr>
<tr>
<td><strong>Looks for:</strong> Specific knowledge and skills</td>
<td><strong>Looks for:</strong> Social utility of learning</td>
</tr>
<tr>
<td><strong>Learns by:</strong> Modeling, exercising, practicing, and receiving immediate feedback</td>
<td><strong>Learns by:</strong> Experience, empathy, and making personal connections</td>
</tr>
<tr>
<td><strong>Values:</strong> Correctness and competence</td>
<td><strong>Values:</strong> Caring and cooperation</td>
</tr>
<tr>
<td><strong>Performs as:</strong> Competent worker</td>
<td><strong>Performs as:</strong> Community contributor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Understanding</th>
<th>Self-Expressive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emphasizes:</strong> Discovery (reasoning)</td>
<td><strong>Emphasizes:</strong> Invention (creativity)</td>
</tr>
<tr>
<td><strong>Looks for:</strong> Ideas, patterns, principles, and rules</td>
<td><strong>Looks for:</strong> Issues, speculations (what if?), ethical and philosophic dilemmas, and creative products</td>
</tr>
<tr>
<td><strong>Learns by:</strong> Inquiry, explaining, proving and probing</td>
<td><strong>Learns by:</strong> Challenge, choice, creativity, and originality</td>
</tr>
<tr>
<td><strong>Values:</strong> Critical thinking and problem solving</td>
<td><strong>Values:</strong> Craftsmanship and communication</td>
</tr>
<tr>
<td><strong>Performs as:</strong> Complex thinker</td>
<td><strong>Performs as:</strong> Creative contributor</td>
</tr>
</tbody>
</table>

When we look at the four styles, we are, in effect, looking at a map for differentiating instruction. To ensure that you are reaching all styles of readers, all you need to do is provide activities and ask questions that engage different styles. Over the course of lessons and units, rotate around the “wheel of style” so that all students are equally engaged by activities in their dominant styles and encouraged to try out new ways of thinking through activities in less-preferred styles. To help you achieve this goal of style rotation we have included a simple Question Menu, which outlines the kinds of thinking associated with each style and provides a set of stems or question starters for developing your own questions in style.
Learning Styles and School Success

Are there particular learning styles that are more vulnerable in our present school design today than others? When comparing normal student populations and their distribution of styles to those populations that are most at-risk, it is quite evident that there is one style that is most vulnerable. Which style do you think that might be?

Which Style Do You Think That Might Be?

Look at the data from the research study conducted by J. Robert Hanson and Thomas Dewing (1991) of at-risk student populations. In their study of over 1,000 students who were identified as being at-risk of not succeeding in the present school design, the percentages compared to typical school populations were as follows:

Data from Learning Style Inventory for Students for At-Risk Students

<table>
<thead>
<tr>
<th>MASTERY LEARNERS (ST)</th>
<th>INTERPERSONAL LEARNERS (SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Population: 35%</td>
<td>General Population: 35%</td>
</tr>
<tr>
<td>Students at risk: 12%</td>
<td>Students at risk: 63%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UNDERSTANDING LEARNERS (NT)</th>
<th>SELF-EXPRESSIVE LEARNERS (NF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Population: 15%</td>
<td>General Population: 15%</td>
</tr>
<tr>
<td>Students at risk: 1%</td>
<td>Students at risk: 24%</td>
</tr>
</tbody>
</table>

How does this data compare with your hypothesis?

Based on the way schools are designed, why do you think Interpersonal learners are most at risk of not succeeding?
Upper Elementary
Mathematics

KENTUCKY LEARNING GOALS AND ACADEMIC EXPECTATIONS

Kentucky Academic Expectations:

1.5 - 1.9: Students use mathematical ideas and procedures to communicate, reason, and solve problems.

2.9: Students understand space and dimensionality concepts and use them appropriately and accurately.

Core Content Standards:

MA-E4-2.1.1c- Students will use measurements to describe and compare attributes of objects to include length, width, height, money, temperature, and weight, sort objects, and compare attributes.

MA-E4-3.1.2- Students will identify, describe, and give examples of basic two-dimensional shapes, and will use these shapes to solve real-world and/or mathematical problems.

THE SCENARIO

Area and perimeter are two geometric properties that are very important in everyday life, but which are often confused. By using exploratory examples and activities, this Task Rotation illustrates the difference between perimeter and area and provides practice for students to explore the concepts on their own.
THE HOOK

Think of a time when you didn’t receive enough information. How much information do you need to find the perimeter and area of a square? Only the measurement of a single side: because of the unique properties of a square, the measurement of a single side allows you to compute both perimeter and area. Today we’re going to look at irregular shapes. How much information do you need to find out their perimeter and area?

Mastery Task
If a rectangle that is 4” x 12” is placed next to one that is 5” x 7”, what is the perimeter of the combined figure? What is the area of the combined figure?

Interpersonal Task
What’s the area and perimeter of your home? Draw a picture of the floor plan of your home showing the dimensions of each room. Then compute the perimeter and area for each room and order them from largest to smallest according to their perimeter. Make a graph that displays the approximate percentage of time in a day you spend in each room.

Understanding Task
If you have a figure like the one below, what are the fewest number of sides you must know to accurately calculate the perimeter and area? Explain your answer.

Self-Expressive Task
Create a problem in which students must find the perimeter and area of two rectangles, a square, and an equilateral triangle. The problem must be solved using four measurements. Can you create another problem using only three measurements? How about two?
**Task Rotation: Looking at Student Work**

So now let’s look at one more Task Rotation, along with the work a student did in completing it. As you look over the Task Rotation and this first-grader’s work, what evidence do you see that this work is deep and personally meaningful?
<table>
<thead>
<tr>
<th>TASK ROTATION: Plants and Their Place in the World</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Draw a flowering plant and label its parts.</strong></td>
</tr>
<tr>
<td><img src="image1" alt="Image of a plant with labeled parts" /></td>
</tr>
<tr>
<td><strong>How would you feel on a sunny or rainy day if you were a plant?</strong></td>
</tr>
<tr>
<td><img src="image2" alt="Image of a happy plant" /></td>
</tr>
<tr>
<td><strong>Why are plants important to our world? Think of two reasons.</strong></td>
</tr>
<tr>
<td><img src="image3" alt="Image of plants and a diagram" /></td>
</tr>
<tr>
<td><strong>What would our world look like if there were no plants?</strong></td>
</tr>
<tr>
<td><img src="image4" alt="Long description of a world without plants" /></td>
</tr>
</tbody>
</table>
How do we know that teaching to all four styles works?

Robert Sternberg and his colleagues at Yale University conducted a remarkable series of studies involving diverse student populations—students from Alaskan Eskimo villages and rural Kenya, as well as a wide range of student populations from across the United States. Students in these studies were taught using the five approaches described below:

• A memory-based approach emphasizing identification and recall of facts and concepts
• An analytical approach emphasizing critical thinking, evaluation, and comparative analysis
• A creative approach emphasizing imagination and invention
• A practical approach emphasizing the application of concepts to real-world contexts and situations
• A diverse approach incorporating all of the individual approaches described above

Do these “approaches” sound familiar to you?? They should!!

When Sternberg and his colleagues analyzed the effectiveness of these five approaches, they noticed some very interesting things...

• When students were taught using an approach that “matched” their own learning style preference, they outperformed students who experienced a teaching style/learning style mismatch.
• When students were taught using a variety of instructional approaches (vs. one single approach), they outperformed other students on performance-based assessments and on multiple-choice memory tests.

What is the significance of these 2 observations? Can they inform your practice in any way?

If you vary the styles of instructional strategies that you use in the classroom, all of your students will eventually get to experience a teaching style/learning style “match.”
Why might this be valuable? Generate as many reasons as you can think of in the box below:

If you vary the styles of instructional strategies that you use in the classroom, your students will also experience a lot of teaching style/learning style “mismatches.” Believe it or not, these mismatches can also be valuable! Why might this be the case? Explain below:
Successful Schools Know What to Pay Attention To (Attention Economy)

Attention—or lack of attention—is “today’s most pressing problem” since “understanding and managing attention is now the single most important determinant of business success.”

_The Attention Economy: Understanding the New Currency of Business_
Thomas Davenport and John Beck (2001)

What do we need to pay more attention to?

1. What skills do students need to develop in order to achieve at high levels?
2. What instructional strategies enable the greatest gains in student performance?
3. How can we address the diversity of our students in a way that is manageable and provides an equal opportunity for all students to achieve?
4. How can we design units of instruction that motivate learners with different learning styles yet still address the skills and core content knowledge students need to succeed?
5. How do schools become professional learning communities that support teachers throughout the improvement process?

The answers to these questions come in the form of five best practices, or the five pillars of The Thoughtful Classroom.

- **Pillar I: Hidden Skills of Academic Literacy**
  A concise list of the skills that separate high achievers from low and average achievers

- **Pillar II: Research-Based Strategies**
  A set of research-based instructional strategies and classroom tools proven to make a difference in student learning

- **Pillar III: Diversity That Works**
  A manageable system for differentiating instruction and assessment using learning styles and multiple intelligences

- **Pillar IV: Classroom Curriculum Design**
  A simple and deep unit design model that helps teachers maximize learning and motivate all students to do their best work

- **Pillar V: Professional Learning Communities**
  Collaborative and coaching structures that make professional learning communities a reality
Pillar I: Hidden Skills of Academic Literacy

What skills do students need to develop in order to achieve at high levels?

It’s not just the research community that has been emphasizing thinking and learning skills. State tests, with their new and more rigorous items assess a host of academic skills.

Below, you will see two science questions taken from state assessment tests. The question printed on the left is a more “traditional” type of test question. The item on the right is representative of the “newer” questions that are appearing more and more frequently on today’s state assessment exams. Take a minute to think about how the questions differ.

<table>
<thead>
<tr>
<th>Traditional Test Item</th>
<th>New Test Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which of the following animals is not endangered?</td>
<td>Below is an imaginary animal called a Woggle. Based on its characteristics, what scientific inferences can you make about its niche and habitat? In other words, tell about where it might live, what it might eat, and what role it might serve in its community. Explain your thinking.</td>
</tr>
<tr>
<td>A) African elephant</td>
<td></td>
</tr>
<tr>
<td>B) American alligator</td>
<td></td>
</tr>
<tr>
<td>C) Blue whale</td>
<td></td>
</tr>
<tr>
<td>D) Dodo bird</td>
<td></td>
</tr>
<tr>
<td>E) Florida manatee</td>
<td></td>
</tr>
</tbody>
</table>


Source: The Strategic Teacher. Copyright ©2007 Thoughtful Education Press. (p.9)

What skills would students need to respond to the “newer” question successfully?
While traditional test questions were designed to test students’ mastery of the content, newer test questions require students to know more than just the content. In order to succeed on today’s state assessment tests, students need to possess a wide variety of skills.

This simple fact raises a question:

What skills do students really need in order to succeed on today’s state assessment tests?

This was a question that we were very interested in answering—and one that we spent a lot of time investigating. We gathered test questions from every state and from all content areas, analyzed the questions to determine what skills were needed to answer them correctly, and compiled a list of the “most-needed” skills. The skills that we identified—skills that students need to succeed regardless of grade level or content area—became known as the “Hidden Skills of Academic Literacy.” We called them Hidden Skills because we discovered that these skills were rarely taught in classrooms, rarely assessed or benchmarked at the various grade levels, and rarely addressed in state curriculum documents. Here are the twelve Hidden Skills we identified through our research:

**Reading and Study Skills**
- Collect and organize ideas through notemaking
- Make sense of abstract academic vocabulary
- Read and interpret visual displays of information

**Thinking Skills**
- Make and test inferences/hypotheses/conjectures and draw conclusions
- Conduct comparisons using specific criteria
- Analyze the demands of a variety of higher-order thinking questions

**Communication Skills**
- Write clear, well-formed, coherent explanations in all content areas
- Write comfortably in the following nonfiction genres: problem/solution, decision-making, argument, comparative
- Read and write about one or more documents

**Reflective Skills**
- Construct plans to address questions and tasks
- Use criteria and guidelines to evaluate work in progress
- Control or alter mood and impulsivity

Which of these skills do you pay most attention to in your classroom? Which do you think need more attention? Put a check mark in the box next to each skill that you currently teach and assess in your classroom.
Do the Hidden Skills really make a difference?

Absolutely! In fact, one of the primary factors that distinguishes high achievers from ‘average achievers’ is the degree to which the twelve Hidden Skills have been mastered and developed. How can you help students build these Hidden Skills? Each of the twenty teaching strategies that appears in *The Strategic Teacher* has the capacity to help students develop at least two—and sometimes as many as six!—of the Hidden Skills. As a result, you can help your students acquire the skills that they need to succeed on state assessment tests (and in the classroom in general) simply by incorporating a variety of teaching strategies into your lesson plans.

Let’s take a few minutes to experience a Hidden Skill first hand. Examine the picture on the next page. The title of the picture is *Guernica*. It was painted by Pablo Picasso in 1937. Take a few minutes to examine it carefully. Then make some notes. List any facts, feelings, ideas, or questions that came to mind while you gave the picture your attention.
My Notes:
Share your notes with a neighbor, are they more alike or different? What are some of the differences between your notes and your neighbor’s?

Now try to categorize your notes using the Window Notes organizer below.

<table>
<thead>
<tr>
<th>Facts</th>
<th>Feelings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Questions</th>
<th>Ideas/Connections/Associations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Thank you for attending!**

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<table>
<thead>
<tr>
<th>Name:</th>
<th>Position/Title:</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organization:</th>
<th>Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Work Phone:</th>
<th>Preferred e-mail (please print clearly):</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Turn Over for more...**
<table>
<thead>
<tr>
<th>Three ideas from our work today:</th>
<th>One thing I would tell a friend about this workshop:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Before today I thought:</td>
<td>Circle one and explain your choice.</td>
</tr>
<tr>
<td></td>
<td>Today was more like <em>riding a bike</em>,</td>
</tr>
<tr>
<td></td>
<td><em>a walk in the park</em>, <em>a sunrise/sunset</em>,</td>
</tr>
<tr>
<td>Now I think:</td>
<td><em>mountain climbing</em>.</td>
</tr>
</tbody>
</table>

Three ideas from our work today:

One thing I would tell a friend about this workshop:

Before today I thought:

Circle one and explain your choice.

Today was more like *riding a bike*, *a walk in the park*, *a sunrise/sunset*, *mountain climbing*.