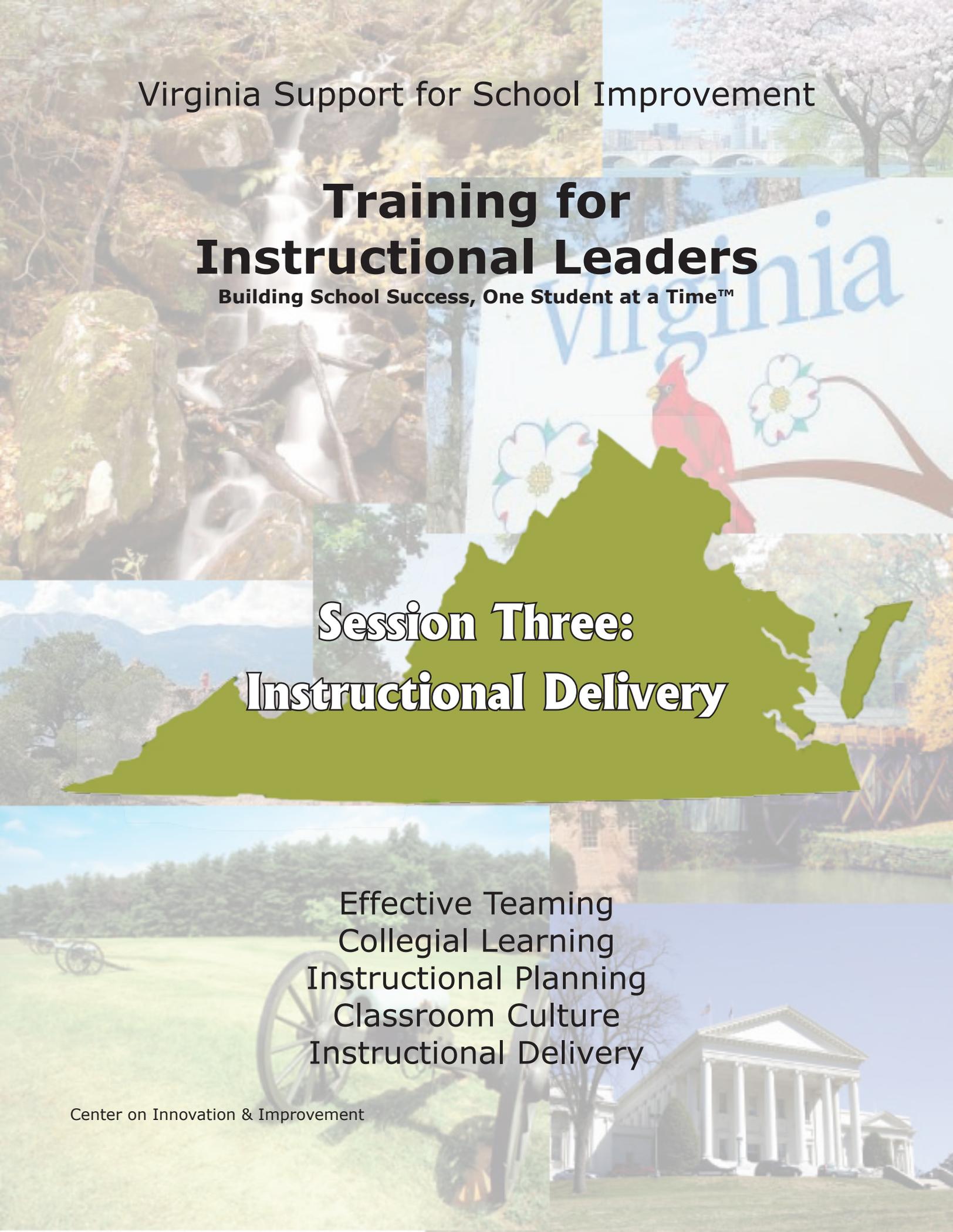


Virginia Support for School Improvement

# Training for Instructional Leaders

Building School Success, One Student at a Time™



## Session Three: Instructional Delivery

Effective Teaming  
Collegial Learning  
Instructional Planning  
Classroom Culture  
Instructional Delivery

Center on Innovation & Improvement

## Information Tools Training

Positive results for students will come from changes in the knowledge, skill, and behavior of their teachers and parents. State policies and programs must provide the opportunity, support, incentive, and expectation for adults close to the lives of children to make wise decisions.

The Center on Innovation & Improvement helps regional comprehensive centers in their work with states to provide districts, schools, and families with the opportunity, information, and skills to make wise decisions on behalf of students.

The Center on Innovation & Improvement is administered by the Academic Development Institute (Lincoln, IL) in partnership with the Temple University Institute for Schools and Society (Philadelphia, PA) and Little Planet Learning (Nashville, TN).

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*The opinions expressed herein do not necessarily reflect the position of the supporting agencies,  
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***The Mega System: Deciding. Learning. Connecting.***

***A Handbook for Continuous Improvement Within a Community of the School***

**Suggested Readings**

**Session 3**

Chapter 3, Instruction: Teacher and Student ..... pgs. 90-102

Chapter 3, Teacher-Student Interaction ..... pgs. 105-106

Chapter 3, Targeted Learning (Motivation & Metacognition)..... pgs. 112-118

Chapter 3, Professional Development..... Pgs. 119-121



## Review of Session Two

In session two, we covered Instructional Planning for Whole-Class Instruction and Work Time, Classroom Management During Work Time, and Monitoring and Reporting Progress. Session two was our transition from team planning in session one to the teacher's organization of instruction for his or her own classroom. Let's look at the Next Steps questions from the last session as a way to review what we covered and to report on each school's application of what was learned.

### Next Steps

What do we do now? How can it be improved? What is our first step?

#### Whole-Class Instruction and Work Time

1. Do teachers use simultaneous groupings of students during something like "work time" to differentiate learning activities?
2. Do teachers use a common planning template (like Purpose, Behavior Check, Review, Think, Know, Show) for planning their whole-class lessons?
3. Do teachers prepare weekly lesson plans and schedules? Do the plans and schedules differentiate between whole-class instruction and work time?
4. Do teachers share their successful whole-class lessons with other teachers? Is this done in Instructional Teams?

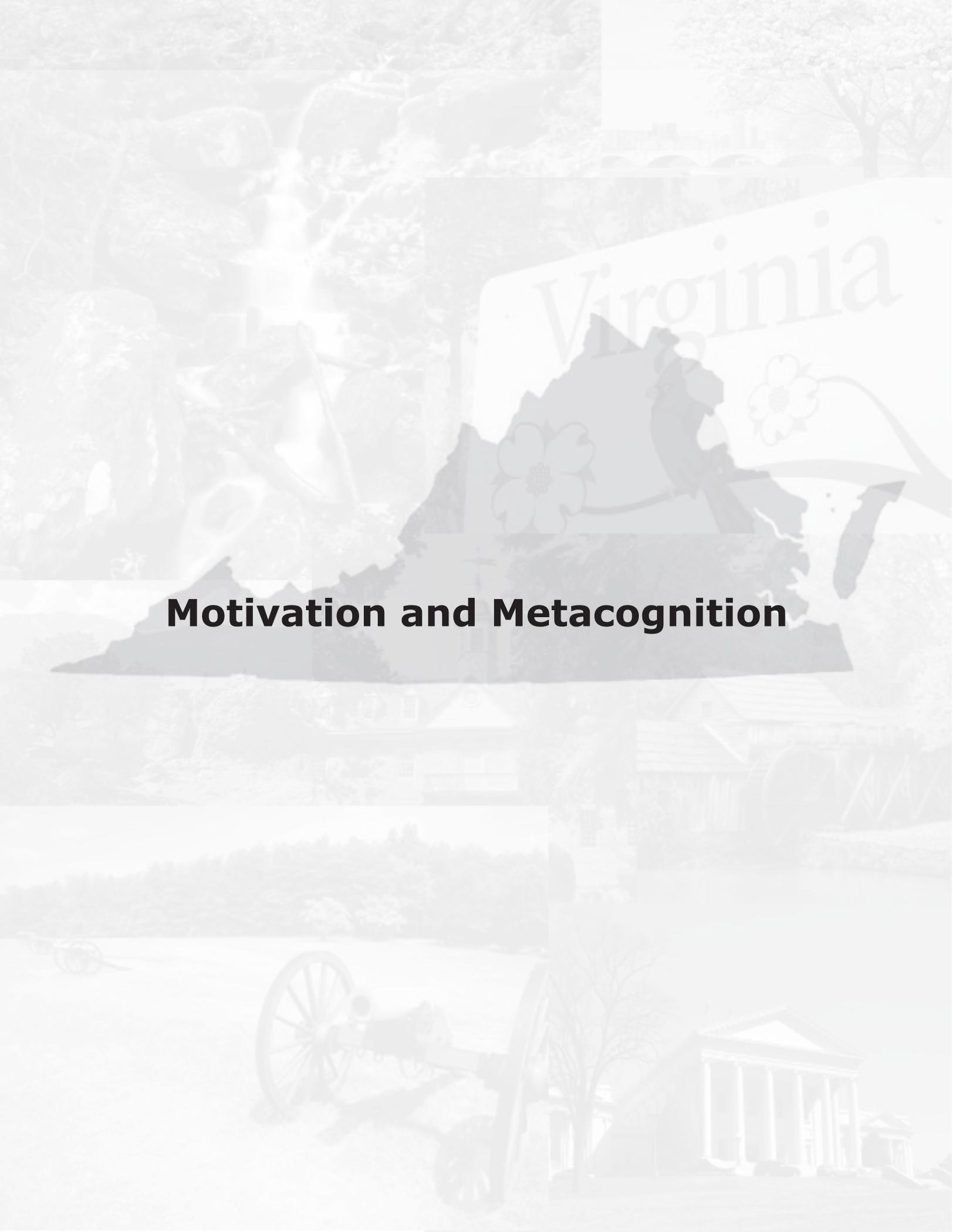
#### Classroom Management During Work Time

1. How are classrooms configured in your school?
2. How do teachers individualize assignments for students? How does each student know what to do?
3. How do teachers manage the flow of students during work time? Do teachers use groups? Are they homogeneous, heterogeneous, fluid?
4. What classroom management techniques do teachers use? Are the techniques used by all teachers?

#### Monitoring and Reporting Progress

1. How do teachers maintain a daily tracking of each student's progress in mastering objectives?
2. How do teachers adjust students' assignments as they note progress toward mastery of objectives? Is this adjustment typically done daily? Weekly?
3. How do teachers systematically report to parents their children's progress in mastering specific, standards-based objectives?





Virginia

# Motivation and Metacognition



## Wanting to Learn and Knowing How

### Motivation

“Motive” is the word we use to explain why someone does what he or she does. Motivation is measured by: 1) willingness to attempt, and 2) persistence. When presented with a challenge or task, how willing are we to attempt it? How persistent are we in sticking with it to the end? Both willingness and persistence are indications of the strength of motivation.

Student motivation to learn depends upon the student’s perceived self-efficacy in the face of a learning challenge, and the teacher’s interaction with students affects perceived self-efficacy over time. Albert Bandura (1997, p. 3) defines self-efficacy perception as “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments.” When a student approaches a new learning task, the student’s perception of his or her ability to successfully complete the task bears on the motivation to persist with the task. Self-efficacy influences academic motivation, learning, and achievement (Pajares, 1996; Schunk, 1995; Schunk & Pajares, 2002). A student’s self-efficacy perception, the anticipation of success, is derived from the student’s assessment of his or her own level of skill and the relative challenge of the task at hand (Csikszentmihalyi, 1990; 1993). When perceived skill is high and the challenge low, the student is bored. When perceived skill is low and the challenge high, the student becomes anxious and prone to avoid the task. The job of the teacher is to set learning tasks that are sufficiently challenging for the student while within the proximate reach of the student’s abilities. The skillful teacher heightens the student’s interest and perception of likely success. This is the essence of targeted learning—planning learning tasks for each student that are appropriate to that student’s demonstrated prior knowledge and provided in an instructional mode that heightens the student’s interest, value for the result, and perception of likely success.

A teacher can increase a student’s perception of self-efficacy, thus elevating the student’s effort, persistence, and ultimate level of performance by: 1) encouraging students to set goals that are specific, challenging, but attainable, 2) modeling effective responses to tasks, 3) providing feedback that encourages students to stay on course until achieving mastery, and 4) making attributional statements that help students understand and appreciate that they are improving their own abilities by accepting challenges and maintaining effort (Bandura, 1997; Schunk & Ertmer, 2000).

The value a student places on learning contributes to the student’s mental calculus in approaching a new task. Even if the student does not find the topic of high interest, the student will persist with the learning task if the topic (or the acquisition of the skill or knowledge) is perceived as valuable. The classic example of perceived value is found in the attention high school sophomores give to mastering the material necessary to acquire a driver’s license. Learning the rules of the road may not be a topic of high interest, but success in learning them is of great value to the student who wants to drive.

The teacher contributes to a student’s desire to learn by modeling an enthusiasm for learning and for the specific topic; presenting material clearly, interactively, and directly; interacting socially and academically with students; and allowing students a degree of self-direction or self-management of their learning toward clear objectives. Students respond to the right blend of caring and expectation, the knowledge that the teacher “knows me and thinks there is something special about me,” recognition for accomplishment derived from evidence of effort and mastery, the opportunity to manage work tasks and to be responsible for them, and content that is challenging and interestingly presented.

The effective teacher scaffolds each students' learning with clear goals, advance organizers, skillful questioning, and targeted learning activities. Reluctant and apathetic students must be resocialized to alter their attitudes and behaviors by developing a close working relationship with them, building upon their existing knowledge and interests, and intentionally expecting their positive attitude toward schoolwork.

While the teacher models enthusiasm for learning and the topic at hand, enthusiasm does not mean pep talks and phony theatrics. It means genuine personal delight in learning, identifying good reasons to view a topic as interesting, meaningful, and important. The purpose is not to amuse or entertain, but to induce students to value the topic or activity. All students, but especially at-risk students, do best with teachers who:

share warm, personal interactions with them but also hold high expectations for their academic progress, require them to perform up to their capabilities, and see that they progress as far and as fast as they are able. These teachers break through social-class differences, cultural differences, language differences, and other potential barriers to communication in order to form close relationships with at-risk students, but they use these relationships to maximize the students' academic progress, not merely to provide friendship or sympathy to them (Brophy, 2004, p. 360).

### Metacognition

Metacognition is thinking about thinking, the learner's ability to know what he or she knows and to adapt learning strategies in order to reach desired ends. Teachers help students build their metacognitive awareness and skills by showing the roadmap of learning, enabling them to see learning objectives as their personal goals. Teachers talk the language of metacognition by thinking out loud, helping students see the possible routes to mastery of new concepts and skills, and encouraging self-direction and responsibility for mastery. The mix of instructional modes and variety of learning activities acquaints students with the repertoire of strategies that might be applied to any learning situation. In addition, the teacher directly teaches students efficient methods for approaching, comprehending, mastering, and sometimes memorizing material within the context of the objectives at hand. Teaching metacognitive and critical thinking skills apart from subject matter is ineffective, and teachers are most successful when they embed this important component of learning within the curriculum.

Brophy (2004) cautions against capitulation to perceived student preferences as opposed to balanced development of a menu of learning strategies and modes:

In order to attain certain learning goals students must engage in processes that they might prefer to avoid (presentations to the class, debates, cooperative work on a group project). Or you might have to limit certain students' opportunities to pursue favorite topics or learn in their preferred mode, because if the students spent too much time indulging these preferences they would fail to develop knowledge or skills needed in school or in life generally. (p. 345)

Teaching and modeling a metacognitive approach to learning benefits students. The teacher shows students how to address a learning task by:

- \* Defining the task: What am I expected to learn and what do I already know?
- \* Goal-setting: How will I know when I have completed the task? What strategies will I apply?
- \* Applying learning strategies: Research, practice, ask questions, memorize, outline, other strategies.

- \* Monitoring: What new information do I need? Is this a simple or difficult task? How do I approach it? How am I doing? Should I try a different strategy?

Teachers help students build metacognitive skills by:

- \* Connecting new learning to prior learning.
- \* Helping students focus on what is expected and HOW to meet those expectations.
- \* Articulating expectations clearly.
- \* Modeling and demonstrating strategies for mastery.
- \* Showing students how to “check” their own mastery.
- \* Breaking complicated processes into simpler steps.
- \* Helping students focus on mastery rather than fear of failing.
- \* Helping students find their own errors and self-correct.
- \* Emphasizing learning, task mastery, and effort rather than ability, performance, and competition.

### Attribution

To what does a student attribute his/her learning success or difficulty? The answer affects both motivation and metacognition. Constructive attributions include effort, strategies applied, and available information: “I need to try harder, try a different approach, ask questions.” Lack of ability is a destructive attribution: “I’m just not smart enough.” Equally non-productive are deflection attributions which externalize the source of difficulty: “It’s not about me. The teacher doesn’t like me. The test isn’t fair.” Even when students are successful, they may express counterproductive attributions: “The test was easy.” “The teacher likes me.” “I was just lucky.” Through their interactions with students, teachers give signals that reinforce attributions. Asking key questions and shaping the acceptable responses helps students view learning as a process over which they exercise considerable control: “What do you think you need to do to reach this objective?” “Why do you think you did so well?” By targeting instruction for each student, the teacher paves a path of possibility that encourages constructive attribution. By modeling metacognitive skills, the teacher emphasizes the learner’s active role in learning, discouraging external attribution for success and failure.

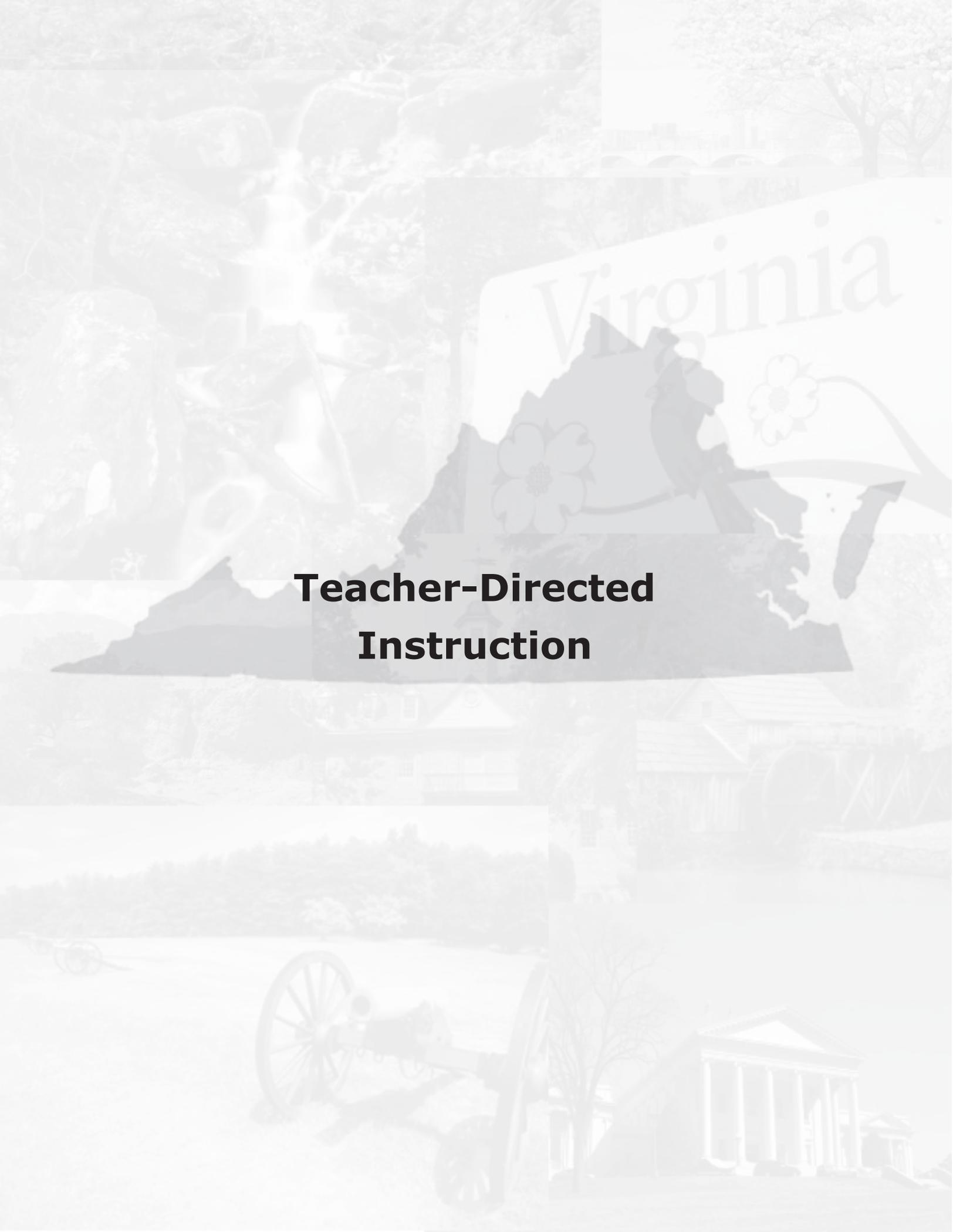
### Think and Share

What metacognitive strategies have you found to be successful—as a teacher or as a learner?

# Motivation, Metacognition, Attribution

## Next Steps

	What do we do now?	How can it be improved?	What is our first step?
How do teachers intentionally use strategies that enhance student motivation to learn?			
How do teachers intentionally use strategies that build students' metacognitive skills?			
How do teachers influence students' constructive attribution for their success and for their failures?			



# **Teacher-Directed Instruction**



## Teacher-Directed Whole-Class and Small-Group Instruction

Teacher-directed instruction may take place with the whole class or in a small group that is headed by the teacher and assembled for the purpose of direct instruction. The teacher plans whole class instruction at key points within the unit of instruction, typically devoting at least some time each day to whole-class instruction in each subject. The amount of time devoted to whole class instruction versus work time will vary from day to day. The teacher prepares a whole class instruction plan for each whole class instruction segment. The plan includes notes to guide the teacher through: Behavior Check, Review and Homework Check, Think, Know, Show. A similar structure is also effective in a teacher-directed small group setting. While student-directed groups are most effective when heterogeneous, teacher-directed groups are usually formed so that the teacher can teach or re-teach material targeted to the needs and readiness of this particular cluster of students. Both student-directed and teacher-directed groups should have fluid memberships—reshuffled or reorganized frequently. For teacher-directed groups, the membership will vary as the teacher forms small groups around a specific objective or topic, bringing together students with a common need for re-teaching or enhancement.

### Well-Organized Presentation and Teacher-Student Interaction

In both whole-class and small-group settings, effective teacher-directed instruction rests on a careful balance of well-organized and delivered presentation of material and teacher-student interaction about the materials.

Teacher-student interactions include teacher praise for and reinforcement of positive student behavior and demonstration of learning as well as questioning techniques and discussion methods. Teacher-student interactions are social, instructional, and managerial. Social interaction has been found to be a particularly strong correlate of academic learning (Wang, Haertel, & Walberg, 1993), as it facilitates a bond of connection between the teacher and the students and increases each student's sense of belonging to the classroom group.

Grossier (1964) suggested six characteristics of good questions that teachers use in instructional interaction with students. The question should be: 1) clear, specific, to the point, delivered one at a time, with a cue to channel the student's response; 2) purposeful, aligned with the lesson's intent, often written in advance by the teacher; 3) brief; 4) natural, in simple language, conversational, appropriate to the level of the class, and with clarification of any new words; 5) sequenced, starting with questions of fact, integrated with previously-discussed material, then prompting students to refine or apply their understanding, using a variety of types from Bloom's taxonomy, moving toward connection of lesson elements; and 6) thought provoking, sufficiently strong to arouse interest, and designed to help students understand and analyze.

Rowe (1974; 1986) demonstrated the effectiveness of sufficient pausing by the teacher after asking a question before calling on a student. When the pause was extended from the typical one second or less to three to five seconds, the quality of responses improved dramatically. These effects were most dramatic with less-able students. Other studies have verified these conclusions (DeTure, 1979; Swift, Gooding, & Swift, 1988; Tobin, 1983).

Drill and recitation occur frequently in classrooms and are important instructional tools, but true group discussion is rare. Activities that teachers call "discussion" tend to be recitations in which teachers ask questions and students respond by reciting what they already know or are now learning. A true discussion involves teachers and students sharing ideas in order to clarify issues, relate new knowledge to their prior experience, or attempt to answer a question or solve a problem (Alvermann, O'Brien, & Dillon, 1990; Tharp & Gallimore, 1988).

The pace of a discussion is noticeably slower than a recitation; longer periods of silence are sustained between speakers. Sometimes questions can actually impede discussions. To avoid this, Dillon (1979) lists six alternatives to questioning that teachers can use to sustain discussions: 1) declarative statements, 2) declarative re-statements that summarize a student's point; 3) indirect questions to avoid the sound of rejection and prompt more careful consideration; 4) imperatives, such as "tell us more about that" or "perhaps you could give us an example"; 5) student questions—asking for students to ask questions of other students; 6) deliberate silence to allow students to absorb content.

### **Think and Share**

How does teacher-student interaction contribute to student motivation to learn? To student meta-cognitive skills? To constructive attribution for outcomes?

## Guidelines for Teacher-Directed Instruction

### Behavior Check

- Time: Approximately 1 to 2 minute
- Purpose: To set the psychological climate in the classroom; cue students to focus in; reinforce attentive behaviors
- Method: Teacher in his/her station, students have learning materials on desks and in order, students in learning posture, smiles on faces. Pro-social behavioral expectations reinforced by teacher.

### Review (and Homework Check)

- Time: 5 – 8 minutes
- Purposes: To provide students with clear evaluations of their progress in attaining learning goals (Marzano, 2003). To detect areas that need further teaching or practice. To connect prior learning with new learning.
- Method: May include homework check. To review : Teacher asks fairly rapid-fire questions from previous lesson to build a bridge to today's new learning. Teacher calls on students in rotation, using various methods. Teacher sprinkles in verbal reinforcement about the progress and understanding students are demonstrating. This is followed with a ROPE (anything to draw in the students' attention). The ROPE signals the transition to the THINK segment, where the new lesson is introduced.

### Think

- Time: Approximately 20% of the Think/Know/ Show sequence time
- Purpose: To introduce new lesson; continue activating prior knowledge; stimulate student cognition relative to the topic.
- Methods: Cues, Advance Organizers, Sprinkling of Questions
- \*  
\*\* Use "Cues" – one of the top 4 selected teacher effectiveness strategies in the Walberg research (Walberg, 1999). Cueing students on what is to be learned and how to learn it activates prior knowledge; students look for what they expect to see as the lesson unfolds, based on where teacher has told them to focus.
  - \*  
\*\* Cues involve "hints" about what students are about to experience.
  - \*  
\*\* Cues should focus on what is important as opposed to what is unusual.
  - \*  
\*\* Research indicates that the more students know about a topic, the more they tend to be interested in it (Alexander et al, 1994)

- \* Questions are effective learning tools even when asked before a learning experience, so sprinkle them in as part of the learning “set.”
- \* Advance Organizers: first popularized by psychologist David Ausubel (1968) who defined them as: “appropriately relevant and inclusive introductory materials...introduced in advance of learning...and presented at a higher level of abstraction, generality, and inclusiveness than the information presented after it. The organizer serves to provide ideational scaffolding for the stable incorporation and retention of the more detailed and differentiated materials that follow. Thus, advance organizers are not the same as summaries or overviews....but rather are designed to bridge the gap between what the learner already knows and what he needs to know before he can successfully learn the task at hand” (p. 148).

An Advance Organizer can be:

- \* A graphic, a visual
- \* A list
- \* A statement
- \* Anything that helps students to focus on the main idea
- \* Anything that helps students order their thoughts
- \* Anything that helps students to relate to material that might otherwise seem fragmented
- \* Anything that helps students know what they’re expected to learn in the next 20 minutes and why it is important

Advance Organizers can produce different results:

- \* Four general types: expository, narrative, skimming, illustrated
- \* All produce fairly powerful results, but expository has the largest effect size (Stone, 1983)

**Expository:** simply describe the new content to which students are going to be exposed

**Narrative:** present information to students in a story format

**Skimming:** used with text that is going to be presented. Teacher asks students to skim, or briefly look at, certain pages, pictures, etc.

**Illustrated:** non-linguistic, visual representation of the material to be covered; a graphic organizer is another term for this. Usually shows the main topic in the center, with subtopics on “arms”

**Summing Up Think:** The THINK segment of teacher-directed instruction is signaled by a ROPE—an interest stimulator—to focus student attention on the introduction of the new lesson for the day. The teacher chooses cues, questions, and/or advance organizers to preview the day’s lesson in a fast-paced presentation of 5 minutes or so. These strategies assist students in activating their prior knowledge and provide them a framework for organizing what is coming next.

## Know

Time: Approximately 60% of the Think/Know/Show sequence time

Purpose: To directly teach the new skills or concepts

Methods: Lecture, Demonstration, Modeling

- \* With clarity and enthusiasm, teacher directly communicates what the students need to know
- \*\* Teacher proceeds in small steps
- \*\* Teacher uses both verbal explanations and physical demonstrations
- \*\* Teacher elicits student responses regularly, occasionally questions (engagement)
- \*\* Teacher “thinks out loud” throughout, verbalizing the thinking processes
- \*\* If presentation is lengthier, teacher gives internal summaries at key points (Rosenshine (1968): “rule-example-rule” approach)

**Summing Up Know:** There will be a variety of strategies employed during this direct teaching segment. This is where “teacher decision-making, guided by clear goals is the key to effective instruction” (Good & Brophy, 2000, p. 375).

## Show

Time: Approximately 20% of the Think/Know/Show sequence time.

Purpose: To find out what students have learned and rehearse their learning

Methods: Conducting verbal drills, recitations; discussions; quiz games

- \*\* Teacher asks students to put new learning into their own words
- \*\* Teacher asks students to apply what they have just learned in solving a problem
- \*\* Teacher may ask class to recite memorized facts or passages
- \*\* Teacher utilizes the 6 Characteristics of Good Questions (Grossier, 1964; see Appendix) when conducting recitations. Questions are: Clear, Purposeful, Brief, Natural, Sequenced, Thought-Provoking.
- \*\* Teacher equitably distributes questions among students
- \*\* Teacher gives quick feedback about student responses.

## The End of Show

The end of the SHOW segment includes LESSON CLOSURE. This is where the RIBBON comes in. It signifies a wrap up to the learning and prompts students where to store the information for later retrieval.

- \* Teacher finishes the SHOW segment with a quick review of the lesson's main points
- \* Teacher may return to the advance organizer, visual, or ROPE object
- \*\* This may only take 2 or 3 minutes, but it is NECESSARY to help students know where and how to store the information they just learned. The teacher is organizing it for the students once more.
- \* Teacher analyzes whether or not re-teaching of the day's concept is necessary.
- \* Teacher does a quick introduction to the Work Time activities, if this has not already been previewed earlier in the day.

**Summing Up Show:** The teacher again is the decision maker, choosing appropriate questioning strategies, discussion, or inquiry to ascertain what the students have learned. The teacher is a master at questioning, balancing the factual recall questions with the higher order thinking questions to evaluate the extent and quality of the student learning during this session. The SHOW segment should end with a definite closure statement to assist students in organizing the learning in their brains once again.

### Think and Share

Review the Guidelines for Teacher-Directed Instruction. Determine how they can be embedded in professional development at your school.

## Whole-Class Instruction Weekly Outline

Week of: \_\_\_\_\_ Teacher: \_\_\_\_\_ Subject: \_\_\_\_\_

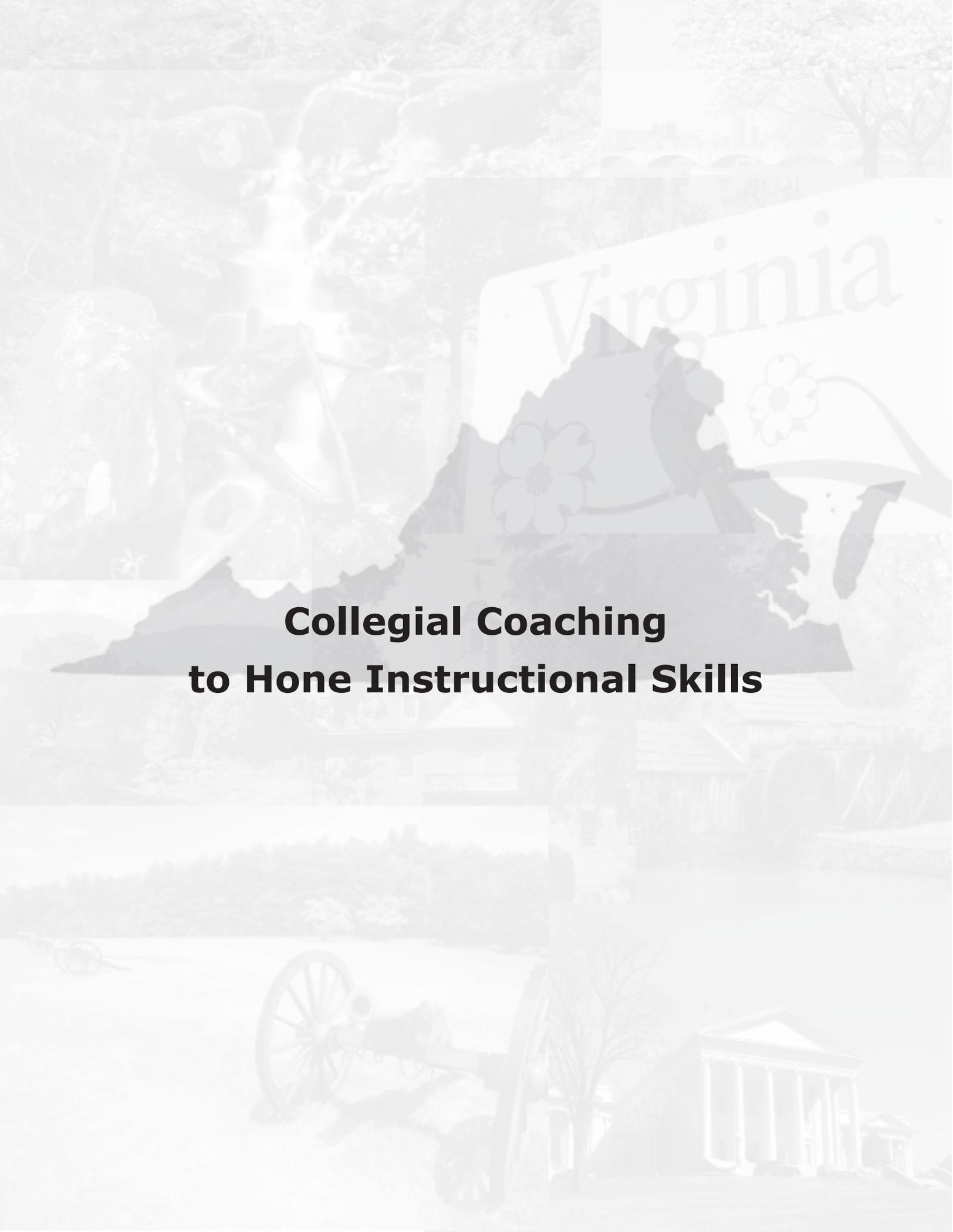
Target Objective Code(s): \_\_\_\_\_

	Monday	Tuesday	Wednesday	Thursday	Friday
Central Purpose of Lesson					
Behavior Check: To set the psychological climate in the classroom; cue students to focus in; reinforce attentive behaviors.					
Review: To provide students with clear evaluations of their progress in attaining learning goals; detect areas that need further teaching or practice; connect prior learning with new learning.					
Think: To introduce new lesson; continue activating prior knowledge; stimulate student cognition relative to the topic through cues, advance organizers, question sprinkling.					
Know: To directly teach the new skills or concepts through lecture, demonstration, modeling.					
Show: To find out what students have learned and rehearse their learning through verbal drills, recitations, discussion, quiz games.					

## Guidelines for Teacher-Directed Instruction

### Next Steps

What do we do now?	How can it be improved?	What is our first step?
How do teachers plan for their direct teaching, in both whole-class and small-group formats?		
Do all teachers use a structure like the Guidelines on page 22 to plan their direct instruction?		
How could the Guidelines be incorporated into professional development?		
How would the Guidelines be useful in Instructional Team planning and sharing?		



**Collegial Coaching  
to Hone Instructional Skills**



## Collegial Coaching to Hone Instructional Skills

“A profession is created not by certificates and censures but by the existence of a substantive body of professional knowledge, as well as a mechanism for improving it, and by the genuine desire of the profession’s members to improve their practice” (Stigler & Hiebert, 1999).

Assist in a process of collegial coaching that supports instructional practices

It is from this wisdom that teachers are encouraged to move from what is standard practice in their school, to a long steady progress of the best kind of professional development of teaching—the continuing effort to steadily improve within an ever-changing world.

The power of peer observations along with the shared-discussion of teaching and learning is dynamic. This experience of collegial coaching will serve to deepen the mutual respect of team members, even as the confidence of professional knowledge is strengthened.

Collegial coaching moves the team members from a forum of teaming to a closer exploration of the teaching practices traditional schooling has held in isolation. In collegial coaching we must re-establish our purposes and modes of collaboration when we open our classroom doors and invite one another in to observe, and constructively discuss our instructional practices, while we progressively develop interdependence for increasing the academic achievement of students. Working with collegial coaching fundamentals will prepare your team.

### Collegial Coaching Key Points

- \* Strengthen an environment of trust by understanding ourselves and others.
- \* Increase interdependency.
- \* Recognize and learn to practice coaching qualities.
- \* Develop communication guidelines, or shared expectations.
- \* Periodically review “before” and “after” observation-discussion questions to refine, or supplement.
- \* Identify a time (i.e., Team meetings) for reflection and discussion of observations.

“Coaching is a mutual conversation between two individuals who each have information to share and skills to gain from interacting with each other” (Kinlaw, 1999).

### **Think, Write, Share**

1. How often do you get to observe other teachers teach? How often do other teachers get to observe you? How do you share your observations?
  
2. How can peer observations, guided by criteria of best practices, help teachers learn from each other and advance their teaching skills?

## Collegial Coaching: Recognizing Coaching Qualities

**Goal:** Recognize and apply the five key qualities of an effective coach.

**How:** Creating an atmosphere of trust, and increasing interdependence are necessary in establishing productive collegial coaching within our teams. They help us to begin a deeper purpose in our endeavors to continuously and systematically professionalize teaching and learning. But it is also valuable to stretch and practice established coaching qualities that will help to build the capacity of all team members to believe in our ability as collegial coaches. Meaning, our role shifts back and forth, sometimes we are “coach” and at other times, we are “colleague-as-learner”. Recognizing and applying the five key qualities of an effective coach will mutually strengthen our ability for both roles.

**What:** The five key qualities of an effective coach are:

- \* **Competency.** The coach has information, ideas, and skills that are helpful to the learner, and helps to build on the learner’s current knowledge and skills. The competent coach promotes self-discovery, and shares his own knowledge and skills as needed.
- \* **Objectivity.** An effective coach leaves his own expectations and strong personal feelings outside, while focusing on the learner’s perspective and intent. Supporting a colleague-as-learner encourages an examination of an idea or purpose for its own sake.
- \* **Adaptability.** Sometimes the best coaching (like teaching) is through spontaneous learning situations even while addressing the goals.
- \* **Caring.** Genuine interest shown through encouragement, empathizing with challenges and celebrating achievements creates the environment where all learning feels safe and professional growth is the outcome.
- \* **Honesty.** Constructive and complimentary feedback that assists in success is respectful and collegial.

**When:** Engaging in the reciprocal roles of “coach” and “learner” through collegial coaching is at the heart of professional learning. If colleagues agree to apply the above five qualities of coaching as they work to improve their teaching, the task of developing collegially becomes integral to the task of improving schools.

Review the “Collegial Coaching: Observation and Discussion Instrument” below and discuss how the five qualities of coaching must be interjected into the use of this tool.

## Collegial Coaching: Observation and Discussion Instrument

*Talking about our teaching:* Discussions about teaching are valuable in their own right. Collegially, we learn by talking about our work.

*Collegial coaching:* Adding the dimension of coaching to our discussions enables us to dig deeper in sharpening our craft. In collegial coaching, we observe each other teaching. Both parties coach—the observer and the observed.

Subject(s) to be observed: \_\_\_\_\_

Grade level to be observed: \_\_\_\_\_

### Questions to discuss BEFORE an Observation

#### The Lesson:

1. Which modes of instruction do you expect to use for this lesson?
2. What is it you want students to know and be able to do as a result of the lesson?
3. What are your expectations for student behavior during your presentation, and how do you reinforce your expectations with the students?
4. What are some strategies you use to involve all students during this lesson?
5. What interactions among students should I expect to see?

#### Differentiation:

1. What activities will you have students engaged in?
2. How do you think these activities will support the lesson?

#### Student Self-Direction:

1. How do you encourage student self-direction and responsibility for learning?
2. Does any particular student, or group of students, within this class present special challenges? How are you dealing with them?

### Classroom Instruction Indicators to Discuss BEFORE an Observation

Review and discuss the school's approved list of Classroom Instruction Indicators.

Before observation discussion date: \_\_\_\_\_

Observation date: \_\_\_\_\_

Collegial Coaches: \_\_\_\_\_ (Signature)

\_\_\_\_\_ (Signature)

## Questions to discuss AFTER observation:

### Presentation:

1. As you look back on the lesson, how do you think it went?
2. What happened that makes you think that way?
3. What do you remember about student response and behavior during the lesson? How did their actions match what you expected/hoped would happen?
4. What do you remember about your actions during the lesson? Your interactions with students?

### Differentiation:

1. How successful were students in moving toward mastery of your objectives?
2. What classroom management techniques do you think work particularly well in your classroom?
3. What do you remember about your actions during the lesson? Your interactions with students?

### Student Self-Direction:

1. Did your presentation create an interest in the topic?
2. Were the students self-directed and on-task?

### Classroom Instruction Indicators:

Discuss observations about the school's approved list of Classroom Instruction Indicators.

### Reflections:

\* Observer: Here is what I appreciated the most about observing your classroom.

\* Observed: Here is what I would like to know more about to improve my teaching.

After observation discussion date: \_\_\_\_\_

Collegial Coaches: \_\_\_\_\_ [Signature]

\_\_\_\_\_ [Signature]

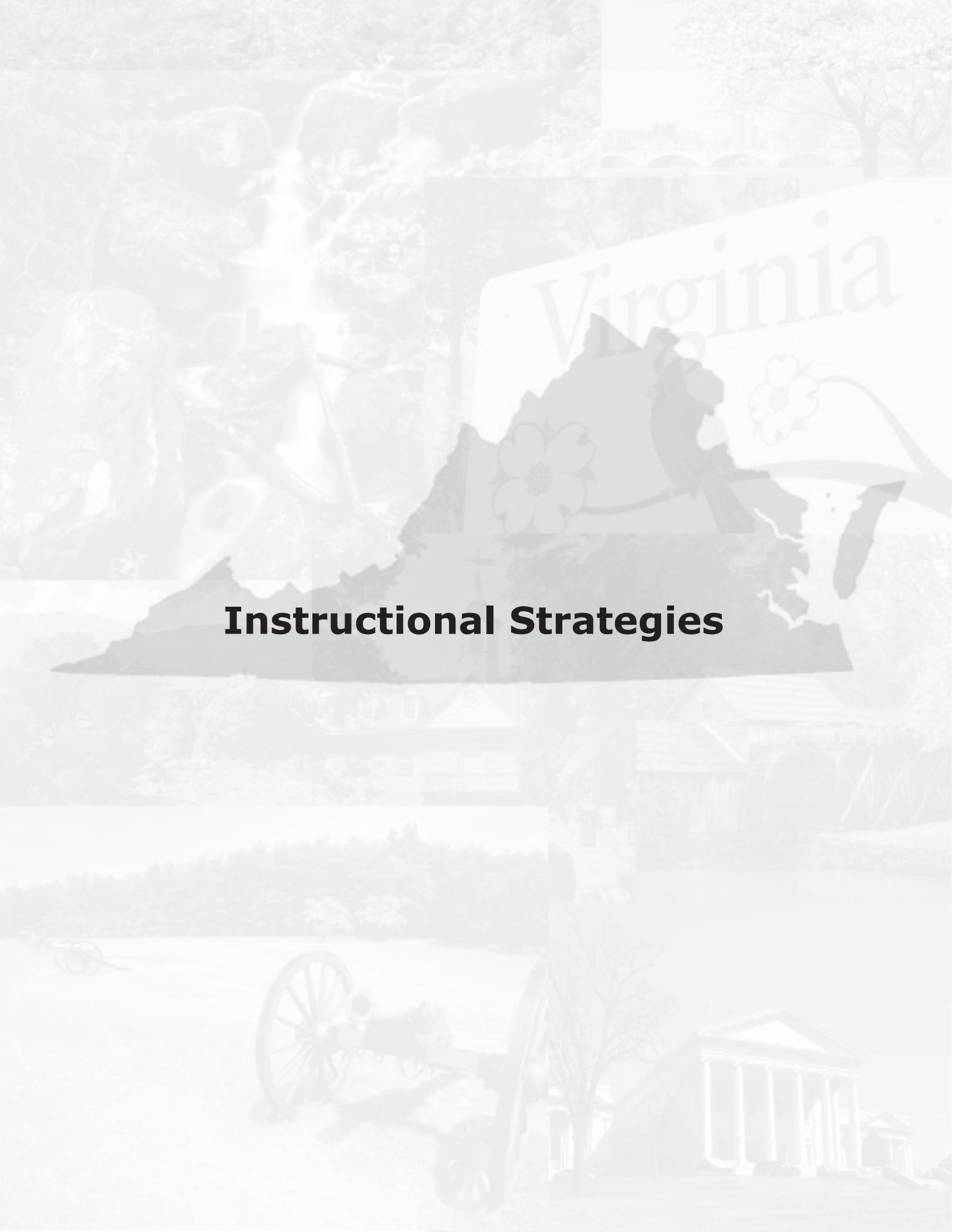
*To know one's self is wisdom, but to know one's neighbor is genius.*—Minna Antrim, American Epigrammatist

## Collegial Coaching to Hone Instructional Skills

### Next Steps

What do we do now?	How can it be improved?	What is our first step?
<p>Review the Collegial Coaching Observation and Discussion Instrument. Could this be an effective tool to encourage self-assessment and shared-discussion of teaching and learning by teachers in your school?</p> <p>How would you adapt it?</p>		
<p>Review the Classroom Instruction Indicators (III/A08-20). How would you incorporate the Indicators into your Collegial Coaching Observation and Discussion Instrument (page 29)?</p>		
<p>How would you incorporate the Guidelines for Teacher-Directed Instruction (pgs. 18-21) into your Collegial Coaching?</p>		





# **Instructional Strategies**



## Six Characteristics of Good Questions

Grossier (1964)

### 1. Clear

- \* Specify the points to which students are to respond
- \* Don't ask questions in uninterrupted series, but rather one at a time
- \* Cue students to respond along certain lines

### 2. Purposeful

- \* Questions should help achieve the lesson's intent
- \* Don't improvise too much
- \* It's helpful to have the key questions written out

### 3. Brief

- \* Long questions are often difficult or hard to understand

### 4. Natural

- \* Simple language; speak conversationally
- \* Adapted to level of the class
- \* If introducing new words, clarify their meanings

### 5. Sequenced

- \* Start with facts
- \* Integrate with previously discussed material
- \* Then ask students to refine their understanding or apply information
- \* Use a variety of question types from Bloom's taxonomy BUT
- \* Don't be rigid in thinking that you always have to go from lowest level to higher order questions in order.
- \* The most important consideration is that the questions help students think about the topic systematically, with connected understandings

### 6. Thought Provoking

- \* Should arouse strong, thoughtful responses
- \* Should help students clarify their ideas, analyze their learning

## Pausing When Questioning

Research shows that teachers wait less than one second after asking a question before calling on someone. Then they wait only one second for a student to give an answer before supplying it themselves, calling on someone else, rephrasing the question, or giving clues. This fails to give students time to think.

When Rowe (1974) trained teachers to extend the time they wait to three to five seconds (which teachers found very difficult to do), the following desirable changes occurred:

1. Increase in average length of student responses
2. Increase in unsolicited but appropriate student responses
3. Decrease in failures to respond
4. Increase in speculative responses
5. Increase in student-to-student comparisons of data
6. Increase in statements that involved drawing inferences from evidence
7. Increase in student-initiated questions
8. A greater variety of contributions by students

LONGER TIME WAITING IN QUESTIONING LED TO MORE ACTIVE PARTICIPATION IN LESSONS BY A LARGER PERCENTAGE OF STUDENTS AND HIGHER QUALITY RESPONSES.

THE EFFECTS ARE MOST NOTABLE ON THE LESS ABLE STUDENTS IN THE CLASS.

Subsequent research has verified Rowe's original studies (DeTure, 1979; Swift, Gooding, & Swift, 1988; Tobin, 1983)

## Six Alternatives To Questioning

(or How to Sustain a Good Discussion)

Drill and recitation occur frequently in classrooms and are important instructional tools, but true group discussion is rare. Activities that teachers call "discussion" tend to be recitations in which teachers ask questions and students respond by reciting what they already know or are now learning. A true discussion involves teachers and students sharing opinions in order to clarify issues, relate new knowledge to their prior experience, or attempt to answer a question or solve a problem. (Alvermann, O'Brien, & Dillon, 1990; Tharp & Gallimore, 1988).

Pace of a discussion – noticeably slower than a recitation; longer periods of silence between speakers.

Sometimes questions can actually impede discussions. To avoid this, Dillon (1979) lists 6 alternatives to questioning that teachers can use to sustain discussions:

1. Declarative statements

"When the war broke out, unemployment dropped" rather than "What happens to the unemployment rate in wartime?"

2. Declarative re-statements

Teachers occasionally summarize, reflecting students' statements to stimulate them to deeper or additional responding

"You say that unemployment tends to drop during wartime.."

### 3. Indirect questions

When a direct question might sound challenging or rejecting, the teacher can make a statement such as “I wonder what makes you think that?” or “I was just thinking about whether that would make any difference.” Indirect questions can stimulate further thinking without generating anxiety.

### 4. Imperatives

“Tell us more about that” “Perhaps you could give us some more examples”

[less threatening than direct requests for the same information]

### 5. Student questions

Rather than asking all of the questions themselves, teachers can encourage students to ask questions in response to statements made by their classmates.

### 6. Deliberate silence

Sometimes the best response is to remain silent for a few seconds to allow students to absorb the content and formulate follow-up questions.

## **Effective Demonstrations**

1. Focus attention. Be sure that all students are attentive before beginning, and focus their attention by holding up an object or pointing to where you want them to look.
2. Give a general orientation or overview. Explain what you are going to do, so that students can get mentally set to observe the key steps.
3. If new objects or concepts are introduced, label them. If necessary, have the students repeat the labels. Students cannot follow an explanation if they do not know what some of the words mean.
4. Go through the process step by step. Begin each new step with an explanation of what you are going to do, and then describe your actions as you do them. **THINK OUT LOUD THROUGHOUT THE DEMONSTRATION.**
5. If necessary, perform each action slowly with exaggerated motions.
6. Have a student repeat the demonstration so you can observe and give corrective feedback. IF the task is short, have the student do the whole thing and give feedback at the end. IF it is longer, break it into parts and have students do one part at a time first, then combine the parts.
7. In correcting mistakes, do not dwell on the mistake and the reasons for it, but instead re-demonstrate the correct steps and have the students try again.

[Good & Brophy, 2000]

## Instructional Practices

### Instructional Preparation

**Relate to personal experience:** Students are asked to connect the subject or topic to their own personal experience or knowledge in order to find out what they already know.

**Previewing information:** Looking over the assignment such as the table of contents, key words and terms, pictures, diagrams, etc. before beginning to learn the topic or subject.

**Advance organizers:** Advance organizers help students to organize their thinking so they know what information they already have and how it will help them in comprehension. It alerts students to the prerequisite concepts needed for comprehension and guides students to the appropriate conceptual files in their minds so that understanding can occur.

An advanced organizer is any device used at the beginning of a learning experience that aims to alert the learner concerning what is to follow and help him organize his expectations so as to learn effectively from it. A summary, a list of contents, or a set of objectives might serve this purpose.

**Brainstorming:** The generation of ideas or solutions to problems involving free-flowing creative thought. Members of a group are encouraged to meet together in a relaxed but purposeful atmosphere and let their suggestions flow without self-censoring no matter how unworkable or outrageous the ideas may seem to be at first sight. The ideas are not criticized or examined logically until the end of the exercise.

**Webbing:** This tool is helpful for brainstorming and generating multiple ideas on a given topic or organizing information in a current topic of study. The major topic is written in the large circle in the center of the diagram. Important ideas related to the major topic are written in the rectangles or smaller circles adjacent to the circle. The final effect will be one of ideas emanating from the circle much like spokes on a wheel.

**Questioning techniques:** There are many questioning techniques. Questions provide a frame of reference, which can help students organize the facts they are learning. It is hard to retain isolated facts. Information organized into a pattern is more easily recalled and applied. It is important to ask good questions and to help students ask questions also.

**K-W-L strategies:** This strategy uses a chart with three columns. The “K” stands for what students already KNOW, “W” stands for what students WANT TO KNOW and “L” stands for what they have LEARNED.

**Predicting:** This is an activity/strategy in which students are asked to tell or state in advance what is going to happen with a given subject, topic, problem, or character on the basis of some special knowledge or information they have received.

**Pre-teach vocabulary:** Teachers can use a variety of ways such as storytelling, writing with PowerPoint, labeling, and recording on tape to pre-teach the vocabulary to students.

**Visual demonstration, illustrations, and models:** Don't just tell students, show them. Use concrete materials to help them see what you are trying to teach them—for example, a skeleton.

**Mini-Lesson:** “Mini” is from the word miniature, which means small in size. Sometimes students can be taught by introducing the “mini” lesson before the “big” unit as a way to get them interested and involved. Students can also do mini-lessons for a small group or a whole class.

## Instructional Prompts

**Graphic Organizers:** Learning aids in which the effectiveness depends on visual organization of information. For more students, visual organizers are easier to grasp—and remember—than are extended blocks of texts. Examples are charts, graphs, outlines, grids, webs, and figures.

**Semantic organizers:** The semantic organizer approach involves activating and organizing prior knowledge, understanding text structure, and developing organizational strategies with both a verbal component and a graphic-structure component.

**Outline:** An outline is a type of graphic organizer which gives a written general description covering the main points of a subject.

**Mnemonics:** A system to develop or improve the memory. A device that can increase your ability to recall information. It assists with rote memorization. There are four categories: 1) New words such as acronyms (NASA) 2) Creative sentences such as, “Every Good Boy Does Fine.” (E, G, B, D, and F) are the musical notes of the lines of the treble clef. 3) Rhymes and songs — Rhymes have been used for centuries to teach children basic facts. 4) Systems — loci and peg. Use the loci system to create visual associations with familiar locations similar to a graphic organizer. Example: floor plan of a house.

**Analogy/Analogies:** A resemblance between two different things, sometimes expressed as a simile. Example: Baseball is to bat as tennis is to racket.

**Imagery:** Words and phrases conveying sensory impressions that help us recreate the work of our imaginations. Most imagery is visual in nature because our sense of sight is the one we depend on most frequently to learn about our environment. School-age children can learn simple imagery techniques such as visualizing spelling words to improve their memories. Older children and teens can learn more structured skills for the same purposes (especially sports, performances, public speaking, and memory enhancement.)

**Color coding:** The effects of color on our minds and bodies are a subject of increasing interest. Color is reflected light. We feel it and see it through our eyes, our sensory makeup and our minds. Colors stimulate an emotional and mental response to what our eyes and bodies record. Teachers have been using color-coding as a way to stimulate, organize, and enhance student learning in many subject areas.

**Highlighting:** A strongly illuminated area or spot in a drawing or on a page used to emphasize. One method is to mark text with a highlighter.

**Chunking:** To form into chunks or smaller pieces. Instead of trying to learn everything all at once, break it up into pieces or “chunks.”

**Key words/labels:** Words that serve as a key to understanding a passage or a concept.

**Directions on overhead or board:** A visual display of directions so that every student can understand what is expected of them. The entire class can review the directions.

**Cue cards:** A signal, such as a word, used as a prompt for another event or to aid in learning various information.

## Instructional Monitoring

**Anecdotal Records:** Brief written notes based on the observation of students. These records can capture the personal insights and vignettes that make teaching so rewarding. For some teachers anecdotal records can be a first step toward authentic assessment.

**Progress Charts:** Charts to mark the progress of students in both skill and content areas.

**Self-Monitoring Checklist:** A checklist that students use to monitor themselves to help them progress to certain levels (self-evaluation).

**Rubric:** A descriptive scoring guide that includes the criteria and performance standards by which a product, performance, or demonstration will be developed and assessed. A rubric often describes the continuum of performances from novice to advanced. Rubrics are used to evaluate student performance on tasks that cannot be scored by machine.

**Timelines for assignment:** A graphic outline of sequenced information for classroom assignments including subjects or topics, due dates, etc.

**Journal entries:** Students often keep journals in various classes in order to write their thoughts and feelings about a given subject. Journals can be used in a variety of ways.

**Portfolio:** A collection of student work chosen to exemplify and document a student's learning progress. Portfolios are a valuable way to assess student learning because they include multiple examples of student work and are specifically intended to document growth over time. They are primarily a tool for teaching and learning.

**Conferences:** Very important to the learning progress of a student are the Parent-Teacher and Student-Teacher conferences.

**Peer reviews:** Students check or review another student's work. This is often done in cooperative learning.

**Questioning techniques:** There are many types of questioning techniques used to indicate how students are learning and what they know.

**Student contract:** An agreement between the student and the teacher.

## References

- Alvermann, D.E., O'Brien, D.G., & Dillon, D.R. (1990). What teachers do when they say they are having discussions of content area reading assignments: A qualitative analysis. *Reading Research Quarterly*, 25(4), 296-322.
- Ausubel, D. (1968). *Educational psychology: A cognitive view*. New York: Holt, Rinehart & Winston.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Brophy, J. E. (2004). *Motivating students to learn*. Mahwah, NJ: Lawrence Erlbaum.
- Brophy, J. E., & Good, T. G. (1986). Teacher behavior and student achievement. In M. Wittrock (Ed.), *Handbook of research in teaching* (3rd ed., pp. 328–375). New York: Macmillan.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper & Row.
- Csikszentmihalyi, M. (1993). *The evolving self: A psychology for the third millennium*. New York: Harper Collins.
- DeTure, L. (1979) Relative effects of modeling on the acquisition of wait-time by preservice elementary teachers and concomitant changes in dialogue patterns. *Journal of Research in Science Teaching*, 16, 553-562.
- Dillon, J. (1979) Alternatives to questioning. *High School Journal*, 62, 217-222.
- Freiberg, H., Prokosch, N., Treister, E., & Stein, T. (1990). Turning around five at-risk elementary schools. *School Effectiveness and School Improvement*, 1, 5-25.
- Good, T. (1996). Teacher effectiveness and teacher evaluation. In J. Sikula, T. Buttery, & E. Guyton, (Eds.), *Handbook of research on teacher education* (2nd ed., pp. 617-665). New York: MacMillan.
- Good, T. L., & Brophy, J. E. (2000). *Looking in classrooms* (8th ed.). New York: Addison Wesley Longman, Inc.
- Grossier, P. (1964). *How to use the fine art of questioning*. New York: Teachers' Practical Press.
- Kinlaw, D. C. (1999). *Coaching for Commitment: Interpersonal Strategies for Obtaining Superior Performance from Individuals and Teams*. San Francisco: Jossey-Bass.
- Marzano, R. J. (2003). *What works in schools: Translating research into action*. Alexandria, VA: Association for Supervision & Curriculum Development.
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66, 543-578.
- Reynolds, A. (1992). What is competent beginning teaching? A review of the literature. *Review of Educational Research*, 62, 1-35.
- Rosenshine, B. (1968). To explain: A review of research. *Educational Leadership*, 26, 275-280.
- Rowe, M. (1974). Wait time and rewards as instructional variables, their influence on language, logic and fate control: Part I – Wait time. *Journal of Research in Science Teaching*, 11, 81-94.
- Rowe, M. (1986). Wait time: Slowing down may be a way of speeding up! *Journal of Teacher Education*, 37, 43-50.
- Schunk, D. H. (1995). Self-efficacy and education and instruction. In J. E. Maddux (Ed.), *Self-efficacy, adaptation, and adjustment: Theory, research, and application* (pp. 281-303). New York: Plenum Press.
- Schunk, D. H., & Ertmer, P. A. (2000). Self-efficacy and academic learning: Self-efficacy enhancing interventions. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 631-650). San Diego: Academic Press.

- Schunk, D. H., & Pajares, F. (2002). The development of academic self-efficacy. In A. Wigfield & J. Eccles (Eds.), *Development of achievement motivation* (pp. 16-31). San Diego: Academic Press.
- Stringfield, S., & Herman, R. (1996). Assessment of the state of school effectiveness research in the United States of America. *School Effectiveness and School Improvement*, 7, 159-180.
- Stigler, J., & Hiebert J. (1999). *The Teaching Gap: Best Ideas from the World's Teachers for Improving Education in the Classroom*. New York: Simon & Schuster Inc.
- Stone, C. L. (1983). A meta-analysis of advanced organizer studies. *Journal of Experimental Education*, 51(7), 194-199.
- Swift, J., Gooding, C. & Swift, P. (1988). Questions and wait time. In J. Dillon (Ed.), *Questioning and discussion: A multidisciplinary study* (pp. 192-212). Norwood, NJ: Ablex.
- Tharp, R., & Gallimore, R. (1988). *Rousing minds to life: Teaching, learning, and schooling in social context*. Cambridge: Cambridge University Press.
- Tobin, K. (1983). *The influence of wait-time on classroom learning*. *European Journal of Science Education*, 5(1), 35-48.
- Walberg, H. J. (1999). Productive teaching. In H. C. Waxman & H. J. Walberg (Eds.), *New directions for teaching practice and research* (pp. 75-104). Berkeley, CA: McCutchen Publishing Corporation.
- Wang, M.C., Haertel, G.D. & Walberg, H.J., (1993) Toward a knowledge base for school learning. *Review of Educational Research* 63, 249-294.
- Waxman, H. C., & Walberg, H. J. (Eds.). (1991). *Effective teaching: Current research*. Berkeley, CA: McCutchan.

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