

GENESEE INTERMEDIATE SCHOOL DISTRICT

GASC Technology Center

LEAP INTO LITERACY: 2-Column Notes

March 18, 2014

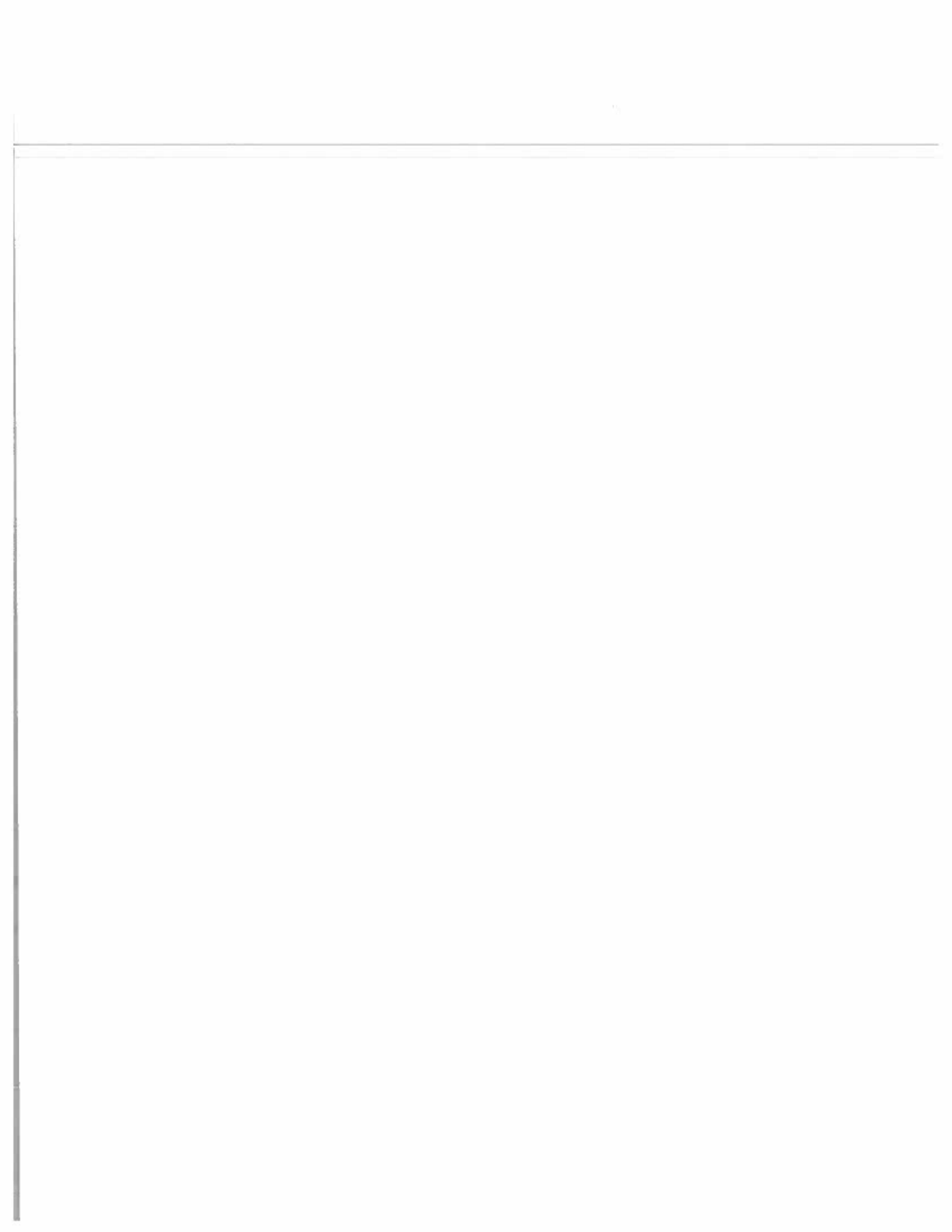
GASC: Room 300

AGENDA

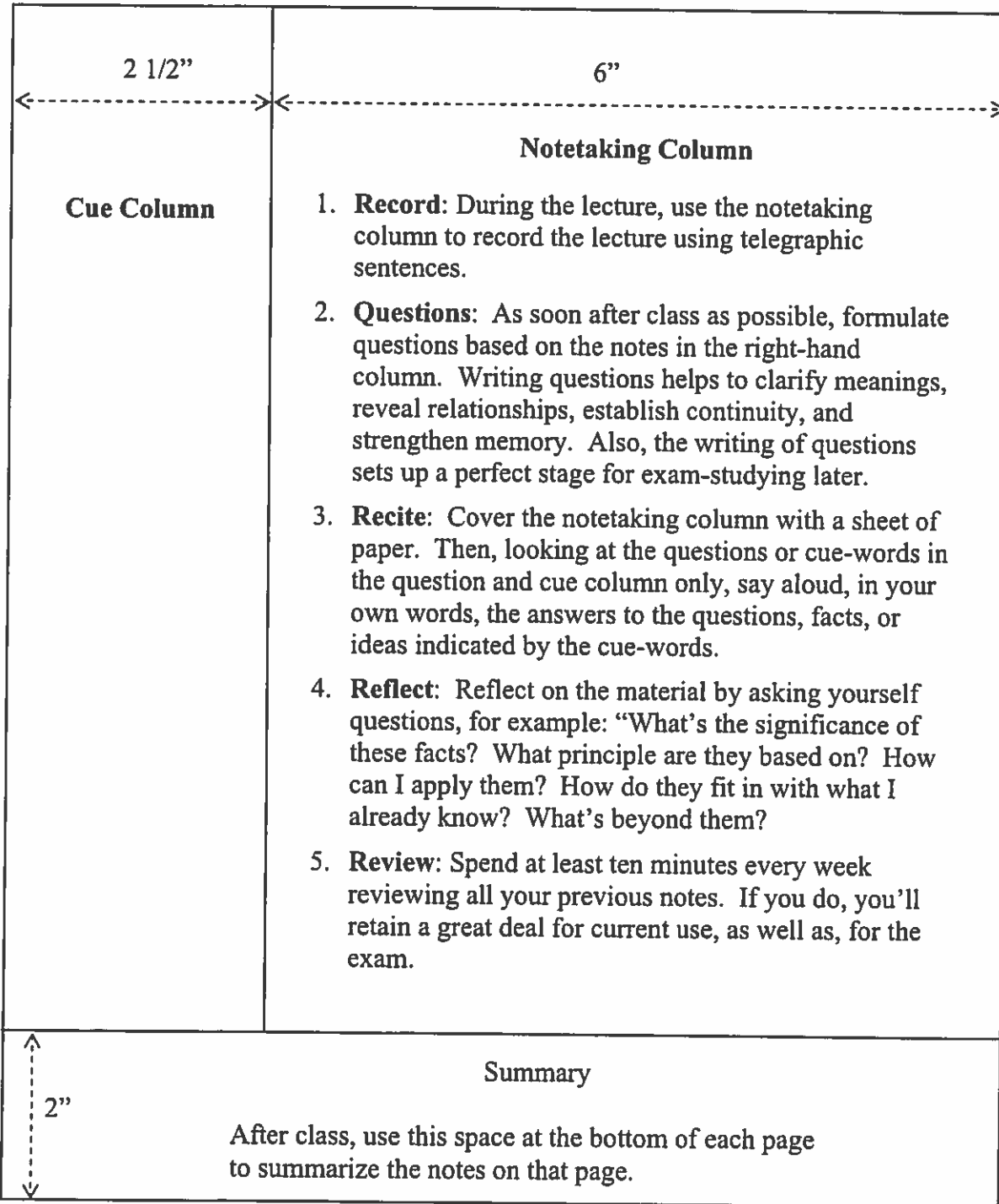
Essential Question: How can students increase their academic performance through literacy instruction?

1. Introduce 2-column notes
 - a. Adapted from "The Cornell Note-taking System"
 - i. Strategically organize new information to increase retention
 - b. Marzano's high-yield instructional strategies
 - i. Cooperative Learning
 - ii. Setting Objectives and Providing Feedback
 - iii. Cues, Questions, and Advanced Organizers
 - iv. Identifying Similarities and Differences
 - v. Summarization and Not-taking
 - vi. Reinforcing Effort and Providing Recognition
 - vii. Homework and Practice
2. Scaffold information for better retention
 - a. Beginners
 - b. Intermediate
 - c. Advanced
3. Practice 2-column notes using the article, "The Brain... Use it or Lose it" by Marian Cleeves Diamond
4. Discuss ways to implement 2-column notes into classroom
5. Closure

MH:MH



The Cornell Note-taking System



The Two-Column Note Taking System

(for lecture or for text reading)

RECALL COLUMN2 1/2".....	RECORD COLUMN6".....
Reduce ideas and facts to concise jottings and summaries as cues for Reciting, Reviewing, and Reflecting.	Record the lecture as fully and as meaningfully as possible.

This format provides the perfect opportunity for following through with the 5 R's of note taking. Here they are:

Record. During the lecture, record in the right-hand column as many meaningful facts and ideas as you can. It keeps you awake! It helps you focus.

Reduce. As soon after as possible, summarize these ideas and facts concisely in the Recall Column. Summarizing clarifies meanings and relationships, reinforces continuity, and strengthens memory. Also, it is a way of preparing for examinations gradually and well ahead of time.

Recite. Now cover the main column, using only your jottings in the Recall Column as cues or "flags" to help you recall, say over the facts and ideas of the lecture as fully as you can, not mechanically, but in your own words and with as much appreciation of the meaning as you can, not uncovering the notes, verify what you have said. This procedure helps to transfer the facts and ideas of your long term memory.

Reflect. Distill opinions from your notes and make such opinions the starting point for your musings on the subject. Your musings help you build structure and make sense out of concepts and academic experiences by finding relationships among them. Reflect by labeling, classifying, outlining and summarizing continually - mentally rearranging and filing daily. Look for what is essential, the underlying structure. Keep those concepts alive by reworking them continually. Unless ideas are placed in categories, unless they are taken up from time to time for re-examination, they will become inert and soon forgotten.

Review. If you will spend 10 minutes every week or so in a quick review of these notes, you will retain most of what you have learned, and you will be able to use your knowledge currently to greater and greater effectiveness.

A note on taping lectures - Under normal circumstances, taping a lecture impedes learning because it is so inflexible. Look at it this way, if you write notes, you can study them in the five minutes before the next class as you walk toward the next building, as you drink coffee, or whatever. In looking over these notes, you may decide that the notes contain only four worthwhile ideas, which you can highlight, relegating the rest of the lecture to obscurity. Whereas the lecture on tape has to be listened to in its entirety including the worthwhile points as well as the "garbage," handwritten notes may be studied selectively. A student who takes the passive way out - recording the lecture on tape as he or she sits back doing nothing - will box him or herself into inflexibility.

For more information visit our Web page! <http://www.middlebury.edu/~learn>

2-COLUMN NOTES

Name: _____ DATE _____

Title: _____

MAIN IDEAS	DETAILS
SUMMARY	

The Brain...Use it or Lose It

This article first appeared in Mindshift Connection (vol. 1, no.1), a Zephyr Press publication edited by Dee Dickinson. by Marian Cleeves Diamond

The 1990s have been declared the Decade of the Brain and the Decade of Education. The human brain receives all education and is the source of all behavior. It is the most complex mass of protoplasm on Earth, and perhaps in our galaxy. A simple essay can only begin to describe its magnificence on the one hand and its malice on the other. By offering a few facts about the development of the brain, I hope to emphasize its role in providing the substrate for education before and after birth.

Various parts of the brain develop at various rates. The part constituting the outer layers of the cerebral hemispheres, called the cerebral cortex (cortex means "bark"), deals with higher cognitive processing. The cerebral cortex is a likely target for a study of the effects of education on the brain. The cortex ranges from 1.5 to 4.5 millimeters thick, with nerve cells accounting for most of the thickness. How do these cells respond to their external environment or, in more specific terms, to education?

The most recently evolved part of the cerebral cortex, the neocortex, has its full complement of nerve cells at a person's birth. Even if an individual lives more than one hundred years, no new nerve cells are formed in this part of the brain. Yet the most rapid growth of the neocortex occurs during the first ten years or so of life.

What, then, is growing? The receptive branches of the nerve cells, called dendrites, are responsible for most of this postnatal neocortical growth, and the neural network they form becomes the "hardware" of intelligence. Dendrites are extensions of the nerve cell membrane that receive the input from other nerve cells. These branches are very responsive to such input, increasing in number with use and decreasing with disuse. The phrase "use it or lose it" definitely applies to this process.

Though most of the research providing information on the plasticity of the brain comes from animal studies, recent experiments from the Brain Research Institute at UCLA have shown similar results in human brains. In Wernicke's area, which deals with word understanding, the nerve cells have more dendrites in college-educated people than in people with only a high school education.

Increases in cortical growth as a consequence of stimulating environmental input have been demonstrated at every age, including very old age. The greatest changes, however—as much as 16 percent increases—have been noted during the period when the cerebral cortex is growing most rapidly—the first ten years. By providing children with challenging experiences through enriched education and environments, those dendrites cannot help but be off to a good start!

Since no two human brains are exactly alike, no one enriched environment will completely satisfy all learners for an extended period. The range of enriched environments for human beings is endless. For some, interacting physically with objects is gratifying; for others, finding and processing information is rewarding; and for still others, working with creative ideas is most enjoyable. But no matter what form enrichment takes, it is the challenge to the nerve cells that is important. Data indicate that passive observation is not enough; one must interact with the environment. One way to be certain of continued enrichment is to stimulate and maintain curiosity throughout a lifetime.

Standards for 2-column notes

Basic

- **CCSS.ELA-Literacy.RST.11-12.1** Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
- **CCSS.ELA-Literacy.RST.11-12.2** Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
- **CCSS.ELA-Literacy.RST.11-12.10** By the end of grade 12, read and comprehend science/technical texts in the grades 11–CCR text complexity band independently and proficiently.
- **CCSS.ELA-Literacy.WHST.11-12.2** Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
- **CCSS.ELA-Literacy.WHST.11-12.4** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- **CCSS.ELA-Literacy.WHST.11-12.10** Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Advanced

- **CCSS.ELA-Literacy.RST.11-12.1** Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
- **CCSS.ELA-Literacy.RST.11-12.2** Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
- **CCSS.ELA-Literacy.RST.11-12.5** Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
- **CCSS.ELA-Literacy.RST.11-12.6** Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.
- **CCSS.ELA-Literacy.RST.11-12.10** By the end of grade 12, read and comprehend science/technical texts in the grades 11–CCR text complexity band independently and proficiently.
- **CCSS.ELA-Literacy.WHST.11-12.2** Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
- **CCSS.ELA-Literacy.WHST.11-12.4** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- **CCSS.ELA-Literacy.WHST.11-12.5** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.
- **CCSS.ELA-Literacy.WHST.11-12.10** Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Marzano's High-Yield Instructional Strategies

In Classroom Instruction that Works: Research-based Strategies for Increasing Student Achievement, Robert Marzano (2001) and his colleagues identify nine high-yield instructional strategies through a meta-analysis of over 100 independent studies. They determined that these nine strategies have the greatest positive affect on student achievement for all students, in all subject areas, at all grade levels. Marzano's nine high-yield instructional strategies are summarized in the table that follows.

High Yield Instructional Strategies	Research says	Examples
Identifying similarities and differences	Students should compare, classify, and create metaphors, analogies and graphic representations	T-charts, Venn diagrams, classifying, analogies, cause and effect links, compare and contrast organizers, QAR , sketch to stretch , affinity , Fruyer model , etc.
Summarizing and note taking	Students should learn to delete unnecessary information, substitute some information, keep important information, write / rewrite, and analyze information.	Teacher models summarization techniques, identify key concepts, bullets, outlines, clusters, narrative organizers, journal summaries, break down assignments, create simple reports, quick writes , graphic organizers , column notes , affinity , etc.
Reinforcing effort and providing recognition	Teachers should reward based on standards of performance; use symbolic recognition rather than just tangible rewards.	Hold high expectations, display finished products, praise students' effort, encourage students to share ideas and express their thoughts, honor individual learning styles, conference individually with students, authentic portfolios, stress-free environment etc.
Homework and practice	Teachers should vary the amount of homework based on student grade level (less at the elementary level, more at the secondary level), keep parent involvement in homework to a minimum, state purpose, and, if assigned, should be debriefed.	Retell, recite and review learning for the day at home, reflective journals, parents are informed of the goals and objectives, interdisciplinary teams plan together for homework distribution, etc
Nonlinguistic representations	Students should create graphic representations, models, mental pictures, drawings, pictographs, and participate in kinesthetic activity in order to assimilate knowledge.	Visual tools and manipulatives, problem-solution organizers, spider webs, diagrams, concept maps, drawings, maps, sketch to stretch , K.I.M. , etc.
Cooperative learning	Teachers should limit use of ability groups, keep groups small, apply strategy consistently and systematically but not overuse.	Integrate content and language through group engagement, reader's theatre, pass the pencil, circle of friends, cube it, radio reading, shared reading and writing, plays, science projects, debates, jigsaw , group reports, choral reading, affinity , etc.

Marzano's High-Yield Instructional Strategies

High Yield Instructional Strategies	Research says	Examples
Setting objectives and providing feedback	Teachers should create specific but flexible goals, allowing some student choice. Teacher feedback should be corrective, timely, and specific to a criterion.	Articulating and displaying learning goals, KWL, contract learning goals, etc.
Generating and testing hypothesis	Students should generate, explain, test and defend hypotheses using both inductive and deductive strategies through problem solving, history investigation, invention, experimental inquiry, and decision making.	Thinking processes, constructivist practices, investigate, explore, social construction of knowledge, use of inductive and deductive reasoning, questioning the author , etc.
Questions, cues, and advance organizers	Teachers should use cues and questions that focus on what is important (rather than unusual), use ample wait time before accepting responses, eliciting inference and analysis. Advance organizers should focus on what is important and are more useful with information that is not well organized.	Graphic organizers , provide guiding questions before each lesson, think alouds , inferencing, predicting, drawing conclusions, skim chapters to identify key vocabulary, concepts and skills, A.C.E. anticipation guide , annotating the text , etc.