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Think, Organize, Write!



An Umbrella of Strategies

with which

Teachers Teach

and

Learners Perform

the Skills of Managing Content

.....

by Thea M. Holtan



Prepared for leaders of learning as you focus on strategic processes.

*Dedicated to learners as you successfully think, organize, write
and read. For these build more than communication.*

They build self-esteem.

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Think, Organize, Write!

Instructor's Guide

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**Appropriate for Both
Expository and Narrative Styles of Reading, Writing, and Speaking**

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• Author and Instructional Designer •
Thea M. Holtan

Thea Holtan designs instruction that leads to successful learning. Throughout the development of her process, she has written two previous publications for teachers and four publications for students; she has also produced video guides and computer applications for students. Her teaching posts include secondary English teacher, sec-

• About the Author •

ondary and elementary media program director, and instructor for four universities. Her Master of Science Degree has served her well in Instructional Media and Technology. She is schooled in Dr. Hilda Taba's "Group Discussion Dynamics," Dr. Madeline Hunter's "Elements of Instruction," and Dr. Benjamin Bloom's "Taxonomy of Cognitive Skills." This Thinking and Writing Process is her synthesis of all of these experiences.

Currently schooling herself in brain-compatible learning, she has discovered that students have succeeded with her processes because the thinking strategies effectively engage the brain in exercising and storing memory. In her teacher workshops she heavily emphasizes brain-compatible learning.

She also heavily emphasizes The Six-Trait Writing Assessment from Northwest Regional Educational Laboratory and the Basic and High Standards of Minnesota.

Ms. Holtan resides in Minnesota, promoting success for both teachers and learners. For over twenty-five years she has nurtured her process to what they are today.

• Acknowledgments •

I thank all who have shared the vision of these processes, all who have encouraged me, and all who have caused successful thinking and communicating for learners. I thank all who have proven that the strategies of these processes improve students' abilities to think, to organize with purposes, and to communicate with fluency.

I thank my friend and colleague Janet Cruse who creatively applies these processes with her music students. Janet continually shares her valued creativity, insights, and suggestions. I thank Janet for her lifting encouragements and for her unwavering belief in the impact that these processes have on learners.

I thank my friend and mentor Leila Anderson. For many years Leila has inspired my professional growth. I thank Leila for her consistent focus on "what is best for learners" and for her conviction that this process is among those "bests."

• A Prefacing Perspective •

Three years ago a teacher in one of my graduate classes brought to me a printout of a fifth grade student's character portrait titled, "My Grandpa." It was her fulfillment of my assignment, "to teach my process to one learner." She had chosen this fifth grade boy in hopes of helping him. She had previously observed his bullying behaviors, his rejection by peers, and his inability to communicate with pen or pencil. She led him through my process on its forms and had him write his document on a Macintosh. It worked! His first product was crude, but this second document, "My Grandpa," was unbelievable. She told me of profound behavioral improvements that had evolved through the processes of only these two documents. He demonstrated pride, calmed behaviors, and accelerated efforts. He wrote the "Grandpa" document so successfully that she submitted it for publication through the local newspaper. She told me of his parents' conference and of their joyous tears in what they had witnessed. As we stood there, she and I, our own tears brimmed at the humble joy of having been a part of this success story.

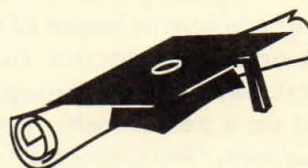
At that moment an awareness sparked within me. I saw how profoundly this process affects learners' self-esteem. I had seen it before, hundreds of times; but this moment of realization awakened something special. I had known that for generations each learner's "academic self-esteem" has been heavily influenced by "how well I read." Until now, reading has been interpreted to be the "smart" skill. Now, finally, **"writing" joins "reading" to give learners their "smart" skills.** For several weeks following this experience, I thought often of this teacher and her learner. Then, a second awareness stirred within me. I began to realize that I was not simply showing colleagues "how to do my process;" **I was enabling them to give successes to their learners.** I was actually teaching learners by helping their teachers. I saw myself as a "second generation" teacher.

Since that spring, I have continued to grow. I have seen many learners judge themselves as "pretty smart," being able to write as they do. I have seen "weak" readers perform as "successful" writers. I have seen young writers transfer their writing strategies to their reading analyses. I have watched hundreds of teachers succeed with a strategy that brings successes to them and to their learners. Since that moment, I have steered my life toward sharing this process. I focus on tangible ways of keeping it alive for many years of teachers and learners.

Since that spring I have discovered the new brain-to-learning research, and I finally understand *why* these process strategies work for students. I have also discovered Portland's *Six-Trait Writing Assessment*; I have learned that the strength of these process strategies lies in the traits of thinking and organizing and that Portland's program adds the traits of writing with voice, word choice, sentence fluency, and conventions. Along with these I have examined Minnesota's Basic and High Standards and determined which standards can be reached with these process strategies. Since that spring I have realized that we are making firm educational changes that will remain with us and our learners. We have just begun a most exciting time!

• Goals •

1. That your students acquire strategies that will help them to think, to organize, and to communicate as writers and speakers and as readers and listeners.
2. That you succeed with individual students' strategies as tools to use throughout your daily lessons.
3. That you process knowledge curricula through the thinking and communicating curricula.
4. That you plan an all-school program of expectations, weaving these strategies together with standards, content, and assessments.
5. That you add a writing assessment program such as Portland's *Six-Trait Writing Assessment* to your curriculum for standard expectations.



• Point of View •

1) **Art** focuses on communication skills. Fields of the communicating arts include: language arts, music arts, visual arts, physical arts, practical arts, technical arts, and the mathematical arts.

2) **Science** focuses on clusters of knowledge. Fields of the sciences include: social, historical, life, health, earth, physical, medical, psychological, and technical sciences.

3) **Teaching across the curricula** means teaching skills of the communication arts by filtering through them knowledge of the sciences.

Sciences can be **personal** or **impersonal**, yet both share the same purpose. e.g.: "My Grandpa" and "Life in Slovakia" both focus on people. "A Laugh That I Enjoyed" and "Laughter" both focus on the psychological science of humor.

Science can be told as **narrative fiction** or as **expository nonfiction**, yet they both convey information. e.g.: "My Dinosaur Friends" and "Dinosaur Discoveries."

• Understandings •

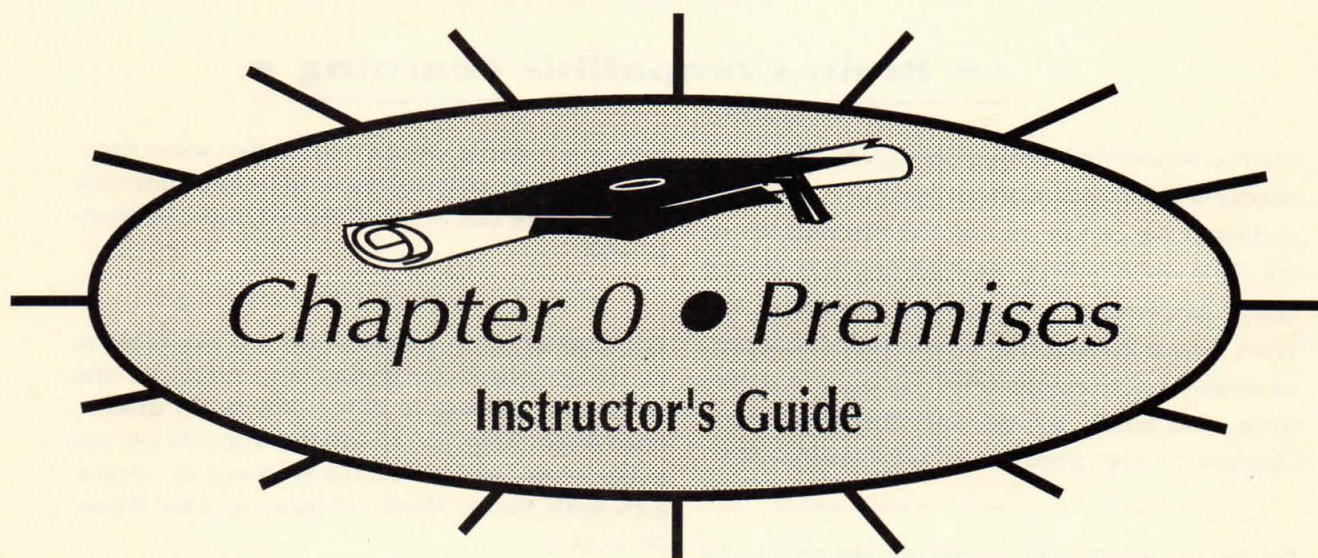
This *Instructor's Guide* focuses on how to teach strategies of *Thinking and Writing Processes* (Chapters 1 - 3, 4, and 6) and how to use these strategies in teaching. This *Guide* communicates with teachers. *Writer's Guides* communicate with learners. Videos and computer disks help learners. Transparencies help teachers.

• Terminology •

- 1) **Process:** A process is best achieved with strategies.
- 2) **Premises:** Premises are the foundation on which a plan is built.
- 3) **Strategy:** A strategy has a plan of action; that plan is aimed at an intent.
- 4) **Authentic Assessment:** An assessment is a measurement of a performance. Several assessments are needed to yield enough information for an evaluation. An authentic assessment is a measurement of an actual or a realistic a performance. In this *Instructor's Guide* I present three forms of authentic assessments. (a) **Portfolios** (or folders) house collected pieces and products from actual performances. (b) **Observations** (recorded) measure how well learners actually do while learning and applying the skill in focus. (c) **Performance tests** (prepared with necessary props, parts, and pieces) simulate the performance of the skill that is being measured.

• Cautions •

- 1) **Throughout Chapters 1-3 teach all strategies that are not marked *Optional*.** Add *optional* strategies with experience.
- 2) **Teach the process at least four times each year, remaining focused on the strategies.** Apply thinking strategies often with your content curriculum. The more often both you and your learners follow it, the better your strategies become. The first experiences cost the most time and confusion. To find time for this process, examine the writing and reading skills that you teach; determine those which are applied and strengthened by this process. Use this process as authentic assessments; determine strategies that need attention, and teach them.
- 3) **Grade and age are terms of approximation.** Use them for general placements of skills. *Readiness* is the term that truly applies. Only you know which if your learners is ready for a given strategy.
- 4) **Focus on processes until learners grasp performances and physical coordinations of the strategies.** Then apply skills to higher (not harder) subjects. (See 4•72-77)
- 5) **Beware of assigning *cute* written products that detract from *real* lifetime skills.** Assign real paragraphs with margins and left-to-right word placements; avoid activities of writing paragraphs in non-paragraph forms.



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- 4 • *Writing Performance*
- 5 • *Standards for Students*
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Appropriate for the Expository Style of Reading, Writing, and Speaking

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New Connections

• Brain-Compatible Learning •

Brain-compatible learning now gives educators concrete information about learners, learning, and what we can do to link the brain to learning. This information, new to me, has solved many mysteries of unanswered questions. For years I have known that strategies of this process work for students. I have known *that* they work, and *when, where, and how* they work. However, I now understand **why they work!**

Dr. Patricia Wolfe has caught my attention. She brings to us strategies that we can use in the classroom. She has worked with tens of thousands of teachers throughout the world. She has coauthored *Mind, Memory, and Learning* © 1990 [1] with Marny Sorgen, and produced video and audio tapes. Dr. Wolfe focuses on helping us to understand information about the brain and to interpret it in terms of classroom strategies with our students.

Her information comes from scientists who are making remarkable discoveries about the brain and how it works. Dr. Marian Diamond is one of those scientists. She shares her research in her seminars and publications. Dr. Diamond coauthored her latest *Magic Trees of the Mind* ©2001 [2] with Janet Hopson.

Journalist Ronald Kotulak shares results of extensive interviews about the brain in his very readable *Inside the Brain: Revolutionary Discoveries of How the Brain Works* ©1996 [3]. Find brain-compatible sources through Books for Educators [3].

Through these and many other sources we are learning some truths about the brain. These truths have everything to do with what we do in our teaching environments. We struggle, though, because we have learned to teach by the modeled ways in which we were taught. Now we must not only focus on the learner, but on ourselves as well. Changing the ways we teach poses no simple task. Perhaps a col-

legial partnership would help so that some helpful and caring colleague could help us not only to recognize our actions, but to improve them as well.

Volumes of brain information are available to us. They help us to understand effective and ineffective strategies. A few key brain discoveries might help you to see the impacts we can make when we teach K-12 students the strategies with these *Think, Organize, and Write!* processes.

A. Dendrites stretch and grow with active thinking. The more the brain engages in active thinking, the more its dendrites branch and bush.

The brain's cortex is made of billions of neurons in which memory is stored. Each time the brain calls for information, the neurons kick into

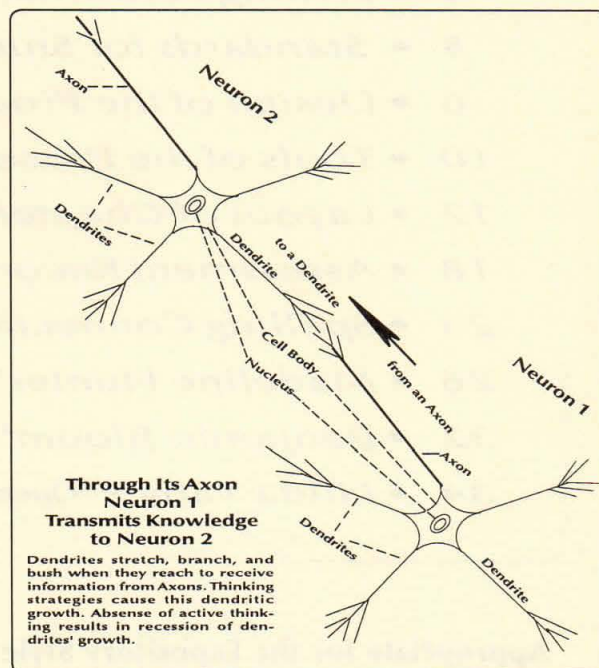


Figure 1
Two Neurons Connect as Part of a Network
Transmitting from Axon to Dendrite

a buzzing network of electrical and chemical charges. Neurons call for memory from one another because memory is stored in them by bits and pieces.

When a neuron has stored memory to contribute to an all-network call, it sends it out of its axon. A dendrite's membranes receive the memory by almost touching the axon membrane of another neuron. Always electrically charged, neurons are ready to send memory to the ends of their axons. When the electrical charge reaches the end of the axon, it causes the release of chemicals in the gap (synapse) between the dendrite and the axon, (See: Figure 1).

When performing the *Thinking and Writing Process*, Chapters 1-3 students connect dendrites by asking themselves the questions: *For what reason? Like or unlike what? For example? A Definition?* They further make dendrite-to-axon connections by charging their memories with thinking of subject synonyms and arranging parts into sentence patterns.

B. Practice makes permanent. Long term memory stores knowledge when sensory and short term memory have practiced an axon-to-dendrite connection several times. The more the practice, the more permanent the memory. This means that early exposures and performances create prior knowledge which is prior memory of information, skills, and strategies.

A K-12, or even a K-6 plan gives students these processes, beginning with appropriate experiences in kindergarten. As students grow with the strategies, their practice perfects their performances because the dendrite-to-axon connections become established.

C. The brain can focus on only one thing at a time. Physiologically the brain can zero in on only one thing at a time. When learning how to drive, the learner cannot engage in a lengthy discussion with a passenger. With accomplished driving skills, a conversation is possible, but when the roads are hazardous, uninterrupted focus must be on the driving.

The strategies throughout this process build upon one another and focus the learner on one strategy at a time. This helps students to suc-

ceed with the processes of thinking and organizing and with the products they produce.

D. Reading yields 10% retention; telling and doing yield 90% retention. When we input information without outputs, learning is minimal. Reading, seeing, and hearing yield the least learning; telling yields more, and telling-and-doing yields the most learning.

When this *process* is learned by talking with partners or groups, student learning is strengthened. In Chapters 1-3 students should be matched with partners until they organize notes in Step 4. In Chapter 4 they should talk through each step and plan their own strategy outlines.

E. Visualizing helps the brain to work with parts and relationships. Learning is enhanced when the brain can envision an idea, a process, a relationship of what is to be learned. Much of what we teach has been in linear, rather than visual form.

Chapters 4 and 6 provide graphic visualizers to help students visualize narrative prose, expository prose, and cognitive thinking processes. These visualizers are to be used as transparency masters for teachers and as practice sheets for students to apply their thinking.

F. The brain is most actively learning between ages 0 - 4, and then up to age 10. Students should begin strategies at early ages. During their first three years foundations are laid for: vision, language, vocabulary, muscle control, intellectual development, and emotional development. As students move into our schools, they should be experiencing high standard performances.

This process builds learners with strategies that they can use for a lifetime. It gives them ways of performing tasks that meet standards with assurance of successes.

Sources

- [1] Wolfe, Dr. Patricia and Marny Sorgen. *Mind, Memory, and Learning*. MM & L, 80 Crest Road, Fairfax, CA, 94930.
- [2] Diamond, Dr. Marian and Janet Hopson. *Magic Trees of the Mind*. Dutton, 2001.
- [3] Books for Educators, Inc., 1-888-777-9827.
- [4] The Brain Store, 1-800-325-4769.

Writing Assessment

• The Six-Trait Writing Assessment •

Until recently we have had little help in assessing writing, or even in defining what we mean by it. Finally a source provides us with a tool to fill this gap.

This plan comes from the Northwest Regional Educational Laboratory of Portland, Oregon. Their assessment model assesses six traits in writing:

- Ideas and Content
- Organization
- Voice
- Word Choice
- Sentence Fluency
- Conventions.

Ideas give the message content, a theme, and details. Students must understand the ideas and their relationship to make sense of them.

Organization is the structure in which a piece is put together. A narrative piece, for example, has a sequential structure; an expository piece has a logical structure of main ideas and supporting details.

Voice gives the piece a sound that make the piece witty, clever, formal, informal, close, distant, cozy, stuffy, and so forth. Voice is enhanced by first, second, and third person.

Word choice gives the piece texture of richness, colorfulness, and precision. The writer must understand the chosen words.

Sentence fluency makes the sentences fluid, choppy, rhythmic, musical. It plays on the ear.

Conventions make the piece mechanically correct. They include spelling, grammar and usage, paragraphs, capitals, and punctuation. Traditionally we have pretty much focused only on the conventions (spelling, grammar, punctuation, capitalization, and so forth).

Of these six traits, **Organization is the trait which the Lab has found is the most difficult**

for students. This is where the *Think, Organize, Write!* works so well with this assessment model. Along with **Ideas and Content, Organization is the strength of these strategies.** Students know where they are going.

A rubric is given to each of the six traits, (See Figure 1). The scoring guide for the rubric has five points. Sliding scores can be given to a trait by marking an up arrow above the score or a down arrow below it. This avoids the 3+ or 3- kind of score so the scores will not be translated to letter grade C+ or C-. Criteria are provided for 1, 3, and 5 of each trait. This informs everyone of the score meanings.

The package provides activities, record-keeping forms, a handbook for writing teachers, sample student papers, and countless writing activities.

To help teachers learn how to use their assessment tool, the Regional Laboratory teaches seminars. They also teach leaders.

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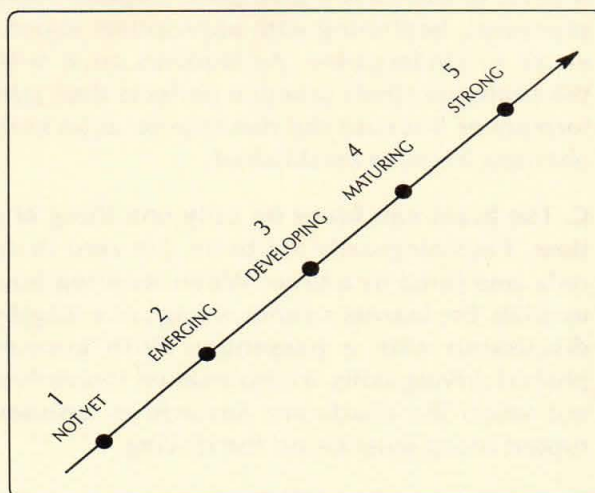


Figure 1
FIVE-POINT SCORING GUIDE (RUBRIC)
Northwest Regional Educational Laboratory

a buzzing network of electrical and chemical charges. Neurons call for memory from one another because memory is stored in them by bits and pieces.

When a neuron has stored memory to contribute to an all-network call, it sends it out of its axon. A dendrite's membranes receive the memory by almost touching the axon membrane of another neuron. Always electrically charged, neurons are ready to send memory to the ends of their axons. When the electrical charge reaches the end of the axon, it causes the release of chemicals in the gap (synapse) between the dendrite and the axon, (See: Figure 1).

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Reading and Writing Performance

• Minnesota's Basic and High Standards •

Accountability is the thrust of having standards. Throughout the whole country educators have been seeking a way to respond to the call for accountability.

Standards have become a focus of the late '90's. Educators have determined what set of expectations K-12 schools should teach and how to assess student performances of them.

Minnesota has identified two sets of standards, **Basic Standards** and **High Learner Profile Standards**. The **Basic Standards** require minimal reading, writing, and math performances that all students must perform for graduation. The reading and writing standards focus on the expository style which is logically organized with main ideas in topic sentences and supporting details in paragraphs. (See: Figure 2)

The **High Learner Profile Standards** establish performances that students must demonstrate to show competencies in ten Learning Areas. As students perform these competencies, they meet with huge success when they use this process' strategies and graphic visualizers found in Chapters 4 and 6. (See: Figure 3)

With these strategies students can read and write in both the expository style and the narrative style. In reading and writing they can interpret and organize expository information logically and narrative events sequentially.

Strategies throughout *Think, Organize, Write!* help students with graphic and linear organizers. Graphic organizers help students to see thought relationships; linear organizers help them to outline them. Once students learn how to think with any strategy, they can apply them to their performances of the High Standards.

MN BASIC STANDARDS	Think, Organize Write! Strategies
Reading and Writing	Read and Write
Expository Style	Chapters 1, 2, 3
Main Idea	Chapter 4
Supporting Details	

Figure 2
Minnesota's Basic Standards
Taught in *Think, Organize, Write!* Strategies

MN HIGH STANDARDS	Strategies to Think, Organize, Write!
Reading	Inform
Writing	Explain
Arts	Describe
Mathematics	Guide a Procedure
Inquiry	Recount (Narrative Style)
Science	Compare/Contrast
Social Studies	Conclude Cause/Effect
Decision Making	Assume-Predict
Resource Management	Conclude
World Languages	Generalize
	Discuss
	Evaluate
	Form Opinion
	Argue

Figure 3
Minnesota's High Standards
Taught in *Think, Organize, Write!* Strategies

Background

• Curriculum Connections •

The Past. Nearly twenty-five years have passed since first thoughts of this process became a part of my teaching. I, a secondary English teacher, had come to a K-12 building as a media director.

I found that all intermediate learners wrote a research paper each year. This, I discovered, was pretty much the only writing that they experienced. Their texts at that time certainly did not help them to become writers. My part was to help them find and use media for note-taking skills. This, of course, made our inexperienced writers' tasks twice as difficult... the thinking, organizing, and writing were prefaced by reading and taking notes. They managed their difficulties by copying World Book Encyclopedia articles for the first half of their documents and finding other sources to copy for the second half. The English teacher in me surged. I had to do something to help them! I designed the first rendition of this process to help learners write those research papers.

The Present. Since those years, the process has grown and so have I. I now see that "thinking skills" and "writing skills" are the real focuses. I no longer perceive one way for writing a researched document and another way for writing other documents. Sources, footnotes and bibliography distinguish a researched document, but the skills are pretty much the same: jotting notes, thinking, organizing, and explaining in writing (or speaking).

Discovered Truths. Since those years I have discovered some truths:

1. This process for thinking and writing works for almost all learners. Currently it is in the hands of nearly 10,000 teachers. Their students have shown what they can do. It is applied in Arabia, Hungary, Malaysia, Australia, Japan, Canada, and most of our states here at home. Heaviest use is in my own home state of Minnesota.
2. This process follows the same order as the NCTE "Writing Process," (sponsored and adopted by the National Council of Teachers of English in response to former President Reagan's "Nation at Risk Report"). The difference is the five-step

Writing Process brainstorms prewriting information, whereas this *Thinking and Writing Process* shows learners "how to think" during prewriting. My process has fifteen prewriting steps in Level 3, thirteen in Level 2, and eleven in Level 1. The actual step of "writing" is almost easy for learners.

3. Writing from knowledge and from research is a "life skill." Writing to communicate is a life skill. Writing a formal researched document is not a life skill; it is a "student skill."
4. "Strategies" of writing and reading are related. Both have the same focuses; both require thinking strategies. Learners first learn the strategies as writers; then they look for the strategies as readers. Looking for the strategies makes them "analytical" readers. "Analysis" of reading strategies is easier to learn if learners first know how to use the strategies in writing. Some learners, ages eight and older, have actually begun to read by first writing their own documents. The strategies that we teach include: authors' comparisons, causes, examples, definitions, and synonyms. The structure that we teach includes: introductory paragraphs, topic sentences, transitions, and conclusions. The styles that we teach include: persuasion, description, narration, and exposition. When taught to apply writing skills to reading analyses, learners' reading skills soar.
5. This process can be internalized by learners. Taught for both non-researched and researched writing, it gives learners strength and independence with thinking and communicating.
6. Learners can apply this process across "information curricula of all the sciences." They can apply the thinking steps to information from textbooks, to shared information, and to information from lyceums, films, or from their own knowledge. The process applies to daily thoughts about information.

I have grown to realize that **teaching across the curricula means using skills of all the arts to communicate the knowledge of all the sciences.**

Relationships

• **Curriculum Connections** •**Process the Information
through Strategies**

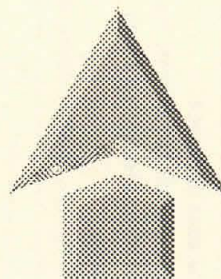
Teach **analytical reading** with **thinking and writing strategies** by processing information of the **science curricula**.

4. Teach reading analysis by applying thinking and writing/speaking strategies.
3. Teach strategies for writing/speaking to communicate thoughts about the sciences.
2. Teach strategies for thinking with information from any of the sciences.
1. Teach the mechanical skills of reading, writing, and handwriting.

4

**Reading
Analysis Skills**

Learn Reading Analysis
Strategies from
Writing Strategies.



2
**Thinking
Strategy Skills**

Apply Thinking
Strategies
to the
Information Curricula.

**Information
from the
Science Curricula**

Social Sciences
Earth Sciences
Physical Sciences
Life Sciences
Health Sciences

3
**Writing-Speaking
Strategy Skills**

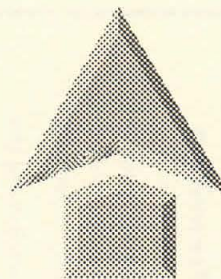
Learn Thinking
and Writing Strategies
with the
Information Curricula.

1
**Reading
Mechanics Skills**

Learn Mechanical
Reading Skills.

1
**Writing
Mechanics Skills**

Learn Mechanical
Writing Skills.

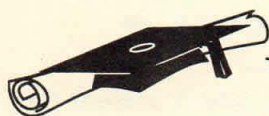


Writing Processfrom the National Council
of Teachers of English**• The Thinking and Writing Process •**• Develop Thinking with Prewriting Strategies •
Rooted in Taba, Hunter, and Bloom by Thea M. Holtan

	Level 1 Grades K - 2	Level 2 Grade 3 - 4	Level 3 Grades 5 - Adult
1. Prewriting • Invention - primary sources - secondary sources - new knowledge • Processing the Information	1. Choose a Subject 2. Find Information from Your Own Knowledge or from Sources 3. Take Notes (10 Gr. 1) (15-25 Gr. 2)	1. Choose a Subject 2. Find Information from Your Own Knowledge or from Sources 3. Take Notes (25-35 Gr. 3) (30-40 Gr. 4)	1. Choose a Subject 2. Find Information from Your Own Knowledge or from Sources 3. Take Notes (40-60)
	3a. Think of Reasons (2-6) 3b. Think of Likenesses [O] and/or Differences [O] (2-4) 3c. Think of Words to Call Your Subject [O] (2-5)	3a. Think of Reasons (6 - 1/3 of notes) 3b. Think of Likenesses [O] and/or Differences [O] (4 - 1/4 of notes) 3c. Plan of Sentence Patterns [O] (5-10) 3d. Think of Words to Call Your Subject [O] (4-6)	3a. Think of Examples [O] (2-10) 3b. Think of Definitions [O] (2-6) 3c. Think of Reasons (8 - 1/3 of notes) 3d. Think of Likenesses [O] and/or Differences [O] (4 - 1/4 of notes) 3e. Plan of Sentence Patterns [O] (8-15) 3f. Think of Words to Call Your Subject [O] (5-8)
	[Learners can think together above this line. However, they design their own products from here to the end.]		
• Designing the Plan	4. Sort the Notes (3-6 stacks) 5. Outline the Notes 6. Number Notes Sensibly [O] (1 to end)	4. Sort the Notes (3-6 stacks) 5. Outline the Notes 6. Write Topic Sentences 7. Number Notes Sensibly (1 to end)	4. Sort the Notes (3-6 stacks) 5. Outline the Notes 6. Write an Introductory Paragraph [O] 7. Write Topic Sentences 8. Sort Notes into Subtopics [O] 9. Number Notes Sensibly (1 to end)
2. Writing • Writing the Draft • Conferencing	7. Write Your Document 8. Put the Parts of Your Document Together	8. Write Your Document 9. Put the Parts of Your Document Together	10. Write Your Document 11. Put the Parts of Your Document Together
3. Revising • Conferencing	9. Finalize Your Document • Self-Questions	10. Finalize Your Document • Self-Questions	12. Finalize Your Document • Self-Questions
4. Editing • Mechanics • Spelling		• Checklist • Spelling Connections • Mechanics Guidelines	• Checklist • Spelling Connections • Mechanics Guidelines
5. Publishing	• Final Draft [O]	• Final Draft [O]	• Final Draft

- [O] = **OPTIONAL**: These strategies, marked [O], can be omitted until learners are ready for them.
 • 3a - 3f: These strategies are for both teachers' group discussions and students' independent practices.

Firm Foundations



• The Design: Premises •

- 1. Definition.** Learning "how to" do a skill requires a process. A learning "Process" is a series of linked experiences that focus on developing a skill while involving thinking above rote and recall levels.
- 2. Four "Beings" of the Learner.** To teach a skill, begin with its physical coordinations and manipulations. This affects the emotional, then the social beings of the learner. After physical coordinations have been learned, apply the skill and challenge the intellectual being.
- 3. Elements of Instruction.** A process, in a teacher-learner situation, is enhanced by a skilled teacher. These four elements provide the components of skilled teaching. Dr. Madeline Hunter (See 0•26-31)
- 4. Open Focusing Questions to recall information.** When writers draw information from their long and short term knowledge, a questioning strategy helps them to surface that knowledge. Dr. Hilda Taba (See 0•34-37)
- 5. Subjects of challenge.** Writers begin by performing the process with single-focused comprehension subjects. They later can be intellectually challenged with subjects of higher thinking levels in documents of other styles and formats. Dr. Benjamin Bloom (See 0•32-33 and 4•72-77)
- 6. Documents of challenge.** Writers begin with documents in simple expository style. When they have learned the process, they can be intellectually challenged by planning and writing documents of other styles, formats, and higher levels of thinking. Dr. Benjamin Bloom (See 0•32-33 and 4•14-68)

Four "Beings" of the Learner

Beings	Early Expectations	→ Proficient Expectations
(4) Intellectual (cognitive)	Note: Enjoy results, but avoid expectations of product excellence until physical coordinations are in place.	Plan challenging subjects of comparisons, causes, predictions, etc. (See Chapter 4) Plan challenging document styles/formats.
(3) Social (affective)	Engage learners in cooperative learning prior to Step 4, "Sorting Notes."	Engage learners in cooperative learning, up to, but not including, Step 4 "Sorting."
(2) Emotional (affective)	Observe self-confidence and assured feelings of success. Build on where each learner is with the psychomotor performances of the steps.	Observe to maintain high comfort levels as you introduce increasingly difficult strategies with each experience.
(1) Physical (psychomotor)	For first experiences focus on this domain. Physical coordination is crucial; it affects all the other domains. Confidence begins here.	Observe to maintain confidence levels by setting check points with learners as they move into guided practice with <u>Video Guides</u> and <u>Writer's Guides</u> .

Instructional Materials

• Understanding the Tools of the Process •

This Guide's Purpose. This Instructor's Guide has been designed and written to be a tool for teaching instructors how to teach and use The Thinking and Writing Process. In this guide you will find explanations and examples for understanding skills and strategies, scripts for teaching learners, and connections with research experts who have contributed perspectives and efficient methods that cause better learning.

This Guide's Arrangement. The chapters are arranged around the three levels of The Thinking and Writing Process. To help you to find the level you seek, the chapters have been numbered with the level numbers. So Chapter 1 is Level 1; chapter 2 is Level 2, and Chapter 3 is Level 3. Now you know why you are currently reading Chapter "0." All premises, introductions, legends, explanations, and connections are in this Chapter 0. Chapter 4 extends Chapters 1-3 by offering additional help in teaching the several styles and formats in which learners should learn to write.

This Guide's Future Developments. Separate publications are in the making. They will be in this same format so you can add them to this book. The first that will be developed will teach skills for fiction readers and writers. The second will teach question-asking strategies. It will help teachers to ask Hilda Taba's open focusing questions beyond recall thinking levels.

This Guide and Accompanying Tools.

- This Instructor's Guide is a text for teachers to use while teaching and applying The Thinking and Writing Process. In compliance with copyrights, this guide must be purchased for each teacher. Copyrights, enforceable by law, state that,

...each home bound or classroom instructor must own this book if any of his or her assigned learners is in any way learning or using this process. Permission for duplication of master forms is granted only to the person for whom this book has been purchased.

Where else can you adopt an entire writing curriculum without the cost of a per-pupil text? Accompanying teaching tools, shared within schools, greatly enhance the load for the teacher.

- Video tapes at Levels 1, 2, and 3 present the whole program to learners, one step at a time. Teachers use my tapes as lead lessons. I can be your team teacher. On them I give the lead lesson, you turn off the tape, and learners follow the instructions with guided practice from you. These tapes also provide teachers with an option for learners who need instructions because of uncertainties or absenteeism. They make wonderful staff development tapes. They also make wonderful tapes for parents helping learners at school or at home.

- Writer's Guides at Levels 1, 2, and 3 are available for learners. Once you and the video tape have guided learners through their first and second experiences, the Writer's Guides help them to become increasingly self-reliant. These guides are designed with "Basic" and "Specific Instructions." "Basic Instructions" lead learners through the basics of each step. "Specific Instructions" give learners minute details that are sometimes needed. Both pages give learners "practical" experiences, applying reading to headings, outlined order, indentions, boldfaced type, illustrations, and captions. They serve not only as guides for this *Process*, but also as valid experiences of reading printed and graphic directives and interpreting "what to do." The guides are tools to teach applied reading skills with minimal guidance. At the end of this chapter's "Skills" section, find master assessment forms for recording the reading skills that are applied through the Writer's Guides. These forms can be stored in learners' portfolios. Writer's Guides are bundled in sets of fifteen to facilitate classroom uses and reduce costs.

- Transparencies are available, helping teachers to explain with examples. Each transparency illustrates an enlargement of a *Process* step as it looks on its corresponding page from the Writer's Guide. These transparencies strengthen teachers' explanations of the steps by illustrating the directions of the Video Guides and bridging their movement into Writer's Guides.

Instructional Materials

• **Using the Tools of the Process** •• **Instructor's Guide** •
For Instructors

1. Choose the level that you will teach.
Level 1 - Grades K - 2
Level 2 - Grades 3 - 4
Grades 5 - 12 first-time learners
Level 3 - Grades 5 - 12
2. Follow its corresponding chapter (1, 2, or 3).
3. Find the listing of the steps at the beginning of your chosen chapter. Plan to omit some or all "Optional" steps for first-time learners.
4. Follow the six parts of each step.
A. Track the **Learned Skills**.
B. **Understand** the step and its thinking skills.
C. **Plan** the year's experiences.
D. Practice the "**Teach**" script and prepare.
E. **Schedule** time for the strategies.
F. Plan how you will **Assess Authentically**.
5. Familiarize yourself with Chapter 0. Find Hunter, Taba, Bloom, and the Tables of skills. The "Teach" scripts incorporate Hunter. Recalling information incorporates Taba's Open Questions; and Tables arrange skills by Bloom.

• **Writer's Guides** •
For Learners

1. Teach first-time learners with the video tape and the transparencies.
2. On their third-time experience, introduce the Writer's Guide. Instruct learners to open to the page and fold back the "Specific Instructions" so that only the "Basic Instructions" show. Show learners how to read the "Basic Instructions" of guides. [The Level 1 Guide works for second semester, Grade 2 readers. The Levels 2 and 3 guides work for most readers of grades 3-4 and 5-12.]
3. Teach learners how to read the headings, indentations, numbers and letters, boldfaced type, margins, illustrations, and captions.
4. Account for their skills in using the Writer's Guide. Record their rubric scores on the record-keeping form. (See page 0•46)

• **Transparency Guides** •
For Instructors

- View a step from the video; then renew w/transparency.
- Tomorrow renew the step being learned today.
- Remind learners of yesterday's video lesson.
- Show an example of how each step looks.

Introduce the Writer's Guides to third-time users.

- Teach learners how to read each step of the Writer's Guides. Project the transparency of today's step to illustrate it and to transfer them to Writer's Guides.
- Project the transparency to stress how to read headings, indentations, numbers and letters, boldfaced type, margins, the illustrations, and captions.

• **Video Guides** •
For Learners and Staff

- To first-time learners, play the video, one step at a time. When you are told to "stop the tape," press STOP and guide learners through the instructions of that step. Use transparencies to review the video instructions.
- Play the tape, view the next step, stop the tape, and again guide learners.
- Play the tape to learners who were absent or who need another explanation of the process.
- Play the tape to volunteers who are helping you to guide learners at school or at home.
- View the video to prepare lessons.
- Play the video to train staff on the steps of the process and on how to teach the process.

• **Computer Discs** •
For Learners

1. Give fourth- fifth-time learners the computer disc.
2. Have them use the database for all prewriting except the topic paragraph and topic sentences.
3. Have them read the instructions on the disc.
4. Have them open the word processor and write their documents from the database on the top of the monitor to the word processor on the bottom.

Instructor's Guide

• **Layout of Chapters 1, 2, and 3** •

The Thinking and Writing Process. Throughout this process you will find something for nearly every learner. This Thinking and Writing Process has been designed with three levels of development, beginning in kindergarten and progressing to adulthood. Each level evolves from a consistent core of steps that builds a framework; each level adds "optional" steps to increase learners' thinking and writing performances. Level 2, then Level 3 add graduating levels of thinking with information and graduating complexities of skills for communicating.

The Chapters. Each Level (1, 2, and 3) is presented in its own chapter of the same number. Therefore, this introductory chapter is numbered "Chapter 0." This Chapter 0 informs you of all the other chapters and the premises on which this Thinking and Writing Process has been designed.

Chapters 1, 2, and 3. These chapters have a consistent format throughout each step, giving you a flow of thought through each of the six sections. Four pages display each step. The first pair of pages presents a list of each step's **skills**, an **explanation** of the step, and a full-year **plan** for implementing the step. The second pair of pages presents a **script** for teaching the step, a **schedule** for planning it, and **authentic assessment** choices in three styles.

Writer's Guides. These guides are separate publications that have been designed for learners to read and follow. Their spiral-bound pages flip up and back so the "Specific Instructions" do not show. Learners read and apply the "Basic Instructions" for one step at a time. They refer to the flipped-back "Specific Instructions" only when they are ready to use them.

3 • 20

Level 3: Reason 3c

3c. think of Reasons

Basic Instructions

3c. Think of Reasons

What is it that I think of?

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What is it that I think of?

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Writer's
Guide

Level
3

Block 6C, First Instruction, Level 3, page 3. Writers explore what leads to decisions from which can be understood with a reason. This question asks why, then, it's not that all causes. They circle the 1 in their "The What Because" after exploring all notes. They must then circle the 2 and either attempt to share with students. They write from 1 to between 4 and 10 of the notes.

Account for Learned Skills...

Skills of Intellectual Arts

- **Knowledge Skill Level**
Knows methods and procedures. [1] [2]
- **Comprehension Skill Level**
Interprets facts, principles, and directions from visual sources [1]
- **Interpretive facts, principles, and directions from visual sources [1]**
- **Application Skill Level**
Applies common usage of a method or procedure. [1]
- **Analysis Skill Level**
Analyzes relationships among parts. [1] [4]

Skills of Relational Arts

- **Intrapersonal - Personal for self [2]**
Manages time and order of space and materials.
Learnes self-reliance and value to working.
- **Interpersonal - Proficient with others [2]**
Interacts uncooperatively, evenly, and fulfills a part of working.
- **Interpersonal - Proficient with others [2]**
Applies skills of relating to people.
- **Applies skills of relating with others [2]**

Skills of Communication Arts

- **Language Arts Skills**
Learning the Process and Its Strategies [1]
Knows: Knows strategies for creating explanatory devices.
Knows: Knows strategies for applying written instructions.
Comp: Interprets and applies written instructions.
Performing the Process and Its Strategies [2]
Knows: Knows information to learn meanings and create explanatory devices.
Applying the Process and Its Strategies [1]
Applies: Applies strategies for interpreting information through texts.
Transferring the Process and Its Strategies to Written and Spoken Text [4]
Breaks down texts, then explains explanatory devices from written and spoken text.
Reasons in the explanatory devices.
- **Technical Arts Skills**
Computer: Uses: Plans the production of a document on desktop. [5]
Video: Plans the production of a video documentary. [6]
The Design and Writing Process by Peter Johnston © 1996

Level 3: Reason 3c

B. Understand...

A Reason is a causal relationship between facts about a subject. When one fact is a cause or an effect of another, the connection is called a "reason."

Causal Relationships among Facts

Reasons

- A Tropical Rain Forest -

Thinking Skill: Analyze Causal Relationships

When learners connect thoughts as causes or effects of one another, they are performing a relation skill in the middle of Bloom's Analysis level of thinking. This is the single most important strategy of the present because learners gain ownership of their inferred connections. This strategy should also be included for understanding any information!

1. This strategy learners learn now, reading the SUBJECT, the LEVEL, and the HOW WHAT REASON question. The question causes learners to connect facts; one is a cause, the other is an effect. When learners make a connection, they circle the "1" on the card and move on to the next note. After questioning all the notes, they review the circled "1" note, select reasons to share with students, and write them under the REASON question.

The efficiency of this strategy is enhanced when understood. Learners heighten their analysis and causal relations by examining all notes on a cause-effect problem through this REASON card. After lists of reasons are formed, enlightening them and explaining their thinking

This layout represents the first two of four pages for each step throughout the Instructor's Guide. "G" illustrates the "Basic Instructions" page for the same step as it is explained to learners in the Writer's Guide.

[illegible]

This layout represents the second two of four pages for each step throughout the Instructor's Guide. "H" illustrates the "Specific Instructions" page for the same step as it is explained to learners in the Writer's Guide.

Writer's Guides give learners opportunities to become self-reliant with the process. They give teachers another tool for teaching "independent practice." Also, they can be used for teaching, applying, and assessing learners' skills with reading and following directions. (See *record-keeping form O•46*)

"Applied" direction reading skills are rarely among the listed reading skills of texts. As Writer's Guides help your learners with independent practice of the process, they also teach learners how to interpret and follow instructions. To me, this is an important skill for tomorrow's world of technical manuals and internet communications.

G. "Basic Instructions," Writer's Guide for Learners. (See illustration "G") Throughout Chapters 1, 2, and 3 "Basic Instructions" are illustrated on each step's first pair of pages, showing how the step looks in the Writer's Guide. They show you basic strategies, basic flow from the headings, and the layout and design for each step. These "Basic Instructions" lead learners through "how to do" each step. They teach K-12 learners the essential steps of three levels. Level 1 is written in a mid-second grade reading vocabulary; Level 2 is in a mid-third grade, and Level 3 in a mid-fifth grade reading vocabulary.

These "Basic Instructions" give learners experiences with several comprehension skills, including decoding text, illustrations, and captions. Teachers use their Instructor's Transparencies to introduce the Writer's Guides. Transparencies project enlarged essentials from Writer's Guides. They help teachers to display examples of how to interpret Writer's Guide instructions and illustrations, and how to infer meanings from margins, headings, indentions, bold type, numbering and lettering.

H. "Specific Instructions," Writer's Guide for Learners. (See illustration "H") For each step, the second pair of pages illustrates "Specific In-

structions" from the Writer's Guide. Throughout Chapters 1, 2, and 3 these illustrations show you the flow of the headings and layouts. "Specific Instructions" are very specific, giving detailed information for learners who seek more depth and detail. In the Level 1 guide, the specifics give illustrated details, rather than verbal details. In Levels 2 and 3, the specifics give verbal details to the point of explaining how to write an outline, a bibliography, footnotes, and a title page on word processor, typewriter, or in cursive handwriting.

Instructor's Guide

• Layout of Chapters 1, 2, and 3 (Cont'd) •

A. Account for Learned Skills. (See illustration "A.") For each step throughout Chapters 1, 2, and 3, Broad skill outcomes are listed. This section has been developed on the premise that "skills are arts," that "communication skills are Communication Arts," and that "knowledge comes from the Informative Sciences." Skills (arts) are listed as Intellectual, Relational, and Communication Arts (skills). "Communication Arts" includes the "Musical," "Visual," "Physical," "Practical," and "Mathematical" Arts of Communication.

B. Understand. (See illustration "B.") Each A - F section is headed with a verb addressing you, the instructor owning this guide. The six verbs each relate to a function with which you as a teacher are involved. "Understand" simply introduces you to the meaning, perspectives, and connections with of the step's strategy.

3 • 40 Level 3: Outlining Notes 1

5. Outline the Notes Basic Instructions

Writer's Guide

Level 3

3 • 41 Level 3: Outlining Notes 5

B. Understand...

Outlining notes is a skill of arranging note stacks and writing TOPIC names on the Topic Outline form. The given focus on the physical skills of manipulating the stacks, their topics, and the Outline form. They advance to considerations of purpose, audience, and form when they arrange stacks to form outline plans for their productions. (See INDEX: Purpose, Audience, Form)

Arrangements for Purposes and Audiences

I. Like	1. Climate	II. Products
II. Climate	II. Life	III. Climate
III. Products	III. Products	III. Climate

• A Tropical Rain Forest •

Thinking Skill: Synthesize Meanings

When learners arrange stacks (concepts) in to their planned purpose, audience, and form, they are performing a production skill, at the beginning of Bloom's Synthesis level of thinking. Synthesis is a thinking skill of using varied pieces to produce a new whole. "This strategy toward the new whole" has learners arrange their categories by writing topic names on TOPIC lines. At first, learners simply learn this strategy's physical movements; later, they grow in intellectual processes.

After three first experiences, we increase expectations: expect form is "response to inform," and audience is "unknown/known same age." Then expect in other forms for other purposes and clarify the purpose, audience. (See page 341)

These imply that purposes be reached if appropriate forms of writing were children's achieve them.

The first: Inform people of the rain forest. - Expository form

The second: Entice people to come, to enjoy. - Narrative form

The third: Save the forest; donate money. - Persuasive form

All: Descriptive form can be used in all these forms.

C. Plan...

Outlining begins the skills of forming a synthesized plan of all that has been gathered and processed. This skill is learned in producing experience. Skill learning implies that learners begin with top skills and progress up a plane of growing competence. Therefore, responses in any skill are "grade one." That is, exactly my point. All of us begin at "grade one" or "starting new skills." All of us begin with physical movements and considerations of the skill. We simply cannot leap to full performance without the physical "grade one" or "first physical" experiences. But that can be occasionally compatible with the performance and therefore, "locally" acceptable. Then our "intentional" steps begin to flourish and grow. We begin all skills with the "grade one" focus on movement and experience. (Teacher Behavior: Teach to the Current Levels of Difficulty, Principal Motivation: Success, Love of Learning)

First Experience (30-45 min) (Video Use: Not Recommended)

- Require that note stacks and outline be in the same order
- Follow Video Guide: Use Teacher's Transparencies
- Monitor: stacks uncrossed, first topic on top
- Teacher Behavior: Monitor and Adjust: Integrate Experience: Behavioral

Second Experience (30-45 min) (Experience: Not Recommended)

- Require stack arrangements show a plan for audience
- Follow Video Guide: Use Teacher's Transparencies
- Monitor: above + outline's TOPIC begins with capital letter
- Teacher Behavior: Monitor and Adjust: Integrate Experience: Behavioral

Third Experience (30-45 min) (Lesson: Recommended)

- Require stack arrangements have a purpose for the audience
- Use Teacher's Transparencies: Begin Writer's Guide
- Monitor: above + apply reading to Basic Instructions
- Teacher Behavior: Monitor and Adjust: Integrate Experience: Behavioral

Fourth Experience (30-45 min) (Lesson: Not Recommended)

- Require topic names
- Use Teacher's Transparencies: Integrated Guides
- Monitor: above +
- Teacher Behavior: Monitor and Adjust: Integrate Experience: Behavioral

Fifth Experience (30-45 min) (Lesson: Recommended)

- Require above +
- Use Teacher's Transparencies: Integrated Guides
- Monitor: above +
- Teacher Behavior: Monitor and Adjust: Integrate Experience: Behavioral

Sixth Experience (30-45 min) (Lesson: Recommended)

- Require above +
- Use Teacher's Transparencies: Integrated Guides
- Monitor: above +
- Teacher Behavior: Monitor and Adjust: Integrate Experience: Behavioral

Skills of Intellectual Arts

- 1. Knowledge Skill Level
- Knows methods and procedures. [1] [2]
- 2. Comprehension Skill Level
- Interprets facts, principles, and directions in
- Interprets facts, principles, and directions in
- 3. Application Skill Level
- Applies correct usage of a method or procedure
- 4. Analysis Skill Level
- Analyzes relationships among facts. [4]
- Analyzes the organizational structure of a plan
- 5. Synthesis Skill Level
- Produces a planned written or spoken document

Skills of Relational Arts

- Interpersonal - Performs for self. [7]
- Manages time and order of space and materials
- Exercises self-reliance and value to workmanship
- Interprets uncertainties, errors, and helps as part of learning
- Interpersonal - Performs with others. [7]
- Applies skills of relating to people

Skills of Communication Arts

- Language Arts
- Learning the Process and Its Strategies [1]
- Knows: Knows strategies for producing a document
- Comp: Interprets and applies video instructions
- Comp: Interprets and applies written instructions
- Performing the Process and Its Strategies [2]
- Plan: Plans the structure of a composition
- Plan: Produces a document in a form to match audience and purpose
- Applying the Process and Its Strategies [1]
- App: Applies strategies for producing a document
- Transferring the Process and Its Strategies to Written and Spoken Text [1]
- Anal: Breaks down text, then rewrites its organizational structure
- Applies to a logical list under the structure of a composition
- Technical Arts Skills
- Computer - Syn: Plans the production of a document on database
- Video - Syn: Plans the production of a video documentary [4]

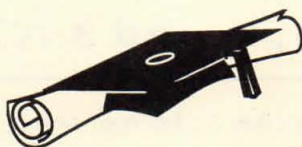
3 • 41

This layout represents the first two of four pages for each step throughout the Instructor's Guide. "A" illustrates the skills of this step. "B" illustrates an explanation of the step. "C" illustrates a one-year plan for the step.

This "A" section correlates skills with one another. Intellectual and Language skills, for example, relate to one another. The skills fall into a taxonomy of development. They are numbered, based on where they fall among the four levels of growth: [1] [Learn], [2] [Perform], [3] [Application], and [4] [Transfer]. Within each of these developmental stages, the steps of Thinking and Writing Process control the order.

Each "Understand" section follows a pattern to help you to follow with consistency:

- the "B. Understand" heading,
- definition and premise of the step,
- illustration using a consistent subject,
- thinking level according to Bloom,
- operation of the step,
- applications to written and spoken text,
- applications to informational curricula.



For more information and listings on thinking levels according to Bloom, see the "Bloom" section, (0•32-33); find Bloom in Madeline Hunter's *Element 2. Teacher Behaviors*, (0•29).

C. Plan. (See illustration "C.") Each "Plan" section first gives you additional perspectives about its step. Then it guides you in planning a year of experiences for your learners. Up to six experiences are proposed here, approximately one every six weeks. Product lengths are moderate, beginning with 20 - 35 notes and ending with 40 - 60 notes. Styles and formats of end products vary to give learners applied experiences with forms and purposes in spoken and written communications. (See Chapter 4.)

"Our precious time with learners is so limited that we cannot afford isolated activities that do not focus on strategy development and learning processes."

"Process Skills" are the focus here, rather than "products." Teaching the "skills" means performing core skills in a beginner's fashion, focusing on thinking processes, strengthening with several applications, adding elevated skills to core steps, producing in varied forms, and assessing with criteria. In contrast, picture learners, writing that traditional "one huge research report for the year." The whole assignment, instead of being an assessment of several "skill-building processes," is little more than one long "activity," coming from nothing and leading to nothing. That scenario rings familiar notes to most of us, but today we know better. Our precious time with learners is so limited that we cannot afford isolated activities that do not focus on skill developments and learning processes.

The "Schedule" section shows varied sources, allowing minimal time for note taking. Four of the experiences use recalled or observed information for "not researched" products; two experiences use sources' information for "researched" products. The premise of this is the fact that learners must experience application of this process to all forms and purposes of writing. If, for example, they only learn how to use it for "researched" information, they very likely will not transfer strategies to "recalled" information. Most people have to be taught transfer of application from one use to another. Hence, for most learners this process will only be used for "researched writing" if that is all they have been experienced.

"Your professional expertise enables you to assign several short processes of writing and to transfer learned skills to reading and listening to text."

Giving learners six experiences provides many options. Product options include a speech, an expository report, an opinion document, a comparison-contrast document, a feature story, and nonfiction narrative; and the list grows. Process options cause learners to apply skills learned in texts, strengthen knowledge from curricula, strengthen listening skills, strengthen viewing skills, write in several forms, write for varied purposes, write to varied audiences; this list, too, grows. This process provides a consistent way of teaching communication across the skills and knowledge curricula. It is not intended as "another thing to do." Here is where your professional expertise is crucial. Your expertise and skills enable you to sort through the mountains of activities and to discard those which have produced less dynamic effects. Your professional expertise enables you to assign several short processes of writing and to transfer learned skills to reading and listening to text. Finally, your expertise enables you to guide learners through applying criteria while assessing their own authentic, skill-focused documents.

Instructor's Guide

• **Layout of Chapters 1, 2, and 3 (Cont'd)** •

D. Teach: Each Step of the Process. (See "D" on the illustrated pages, below, from Chapters 1, 2, and 3.) This section is primarily written in the form of a script. I deliberated carefully before concluding with this script format. In previous years I had written books to teachers, but those books told teachers how "to do" the process. In my recent *Writer's Guides* for learners I list full instructions for "doing" the process.

lines like, "...for me, saying '___' really works." As I've given my quotes, participants have fervently written my effective quotes.

Considering all aspects, I decided to write scripts of "how I teach" each step. The scripts are intended to help you to develop your own skills as fast as possible. I suggest these uses:

The image displays three sample pages from the Instructor's Guide, illustrating the layout for teaching steps D, E, and F. Each page is labeled 'Level 3: Outlining Notes 5' and '3 • 42', '3 • 43', and '3 • 43' respectively.

- Page D:** Titled 'D. Teach: Outlining the Notes...', it contains a script for teaching the process of outlining notes. It includes instructions for the teacher and learners, such as 'Outline notes begins the development of a plan. A plan focuses on a purpose, an intended audience, and the form in which the writing will be written.' and 'Your notes are in stacks that are named on the topic line card.' The page is marked with a large 'D'.
- Page E:** Titled 'E. Schedule...', it shows a time schedule for the step. It lists six experiences with their durations and topics, such as 'First Experience: 45 minutes (approx.) Topic: Not Researched' and 'Second Experience: 45 minutes (approx.) Topic: Not Researched'. The page is marked with a large 'E'.
- Page F:** Titled 'F. Assess Skills Authentically...', it shows various ways to assess the step authentically. It includes a 'Portfolio Sample' section with a list of skills to be assessed, such as 'Syn. Outline form', 'Comp. Interpreting', and 'Anal. Follows audience'. It also includes a 'Rubric' section with a list of skills to be assessed, such as 'Syn. Explain main idea', 'Anal. Detects the audience', and 'Syn. Explain main idea'. The page is marked with a large 'F'.

This layout represents the second two of four pages for each step throughout the Instructor's Guide. "D" illustrates the script for teaching the step. "E" illustrates the step's time schedule. "F" illustrates some ways to assess the step authentically.

What has been missing all these many years is a guide that tells instructors not only how "to do," but also how "to teach" this process. I perceived a huge strategy issue. Should I "tell you" how to teach it, and let you figure out the best ways to implement my "how to do's?" Or, should I "show you" how to teach it and "lead you" through lessons? I reflected back on the thousands of colleagues in my seminars over the years. I've shared

- Practice scripts with friends or family.
- Enlarge them on a copier so you can easily read them aloud to learners.
- Read them to learners; watch them respond.
- Use them to prepare the props that you need.
- Use them to review your own growing skills.
- Use noted Hunter's Lesson Design, Principles of Learning, and Teacher Behaviors to account for your lessons. Find more with pages 0•26-31.

The scripts show teachers how lessons look. They help teacher to teach the strategies of the basic process.

Prefacing each script, introductory comments remind you of perspectives on the step.

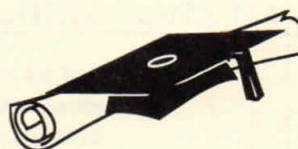
Throughout the scripts, Instructor's Transparency Guides and Writer's Guides are woven into your plans. For information about these tools, see "Tools" on pages 0•10-11.

Throughout the scripts many of Madeline Hunter's "Elements of Instruction" are matched to what you are doing. This is intended as proof of researched validity of your own lessons. It is also intended to help colleagues who are new to the vocabulary and the implementations of Dr. Hunter's "Elements of Instruction."

E. Schedule. (See "E" on the illustrated pages, left, from Chapters 1, 2, and 3.) Here, you learn approximate amounts of times to schedule for each experience. [Time for getting on and off task are not included in these estimates.] Also, in this section are reminders of the kinds of sources and the quantity of notes. In the center are approximations of how many strategy applications you can assign a particular step.

Assessments give data of performances. Authentic assessments focus on realistic performances. Evaluation can be determined with the data collected from various assessments.

F. Assess Authentically. (See illustration "F") "Assess" means "to gather evidence" of performance. It is a function that happens before "evaluate" or "judge." Therefore, "evaluations" (judgments) are made from a collection of measured "assessments" of a performance.



"Authentic" means "real, related, actual" (unlike multiple choice, true and false, fill in the blank, or write about.) "Authentic" means the "actual performance" of a skill.

"Authentic Assessment," then, means collected evidence of actual skill performances.

I have listed three forms of "authentic assessments" which focus on the skills listed under the sections, "A. Account for Learned Skills." You may collect assessments of learner's performances by recording them on a record-keeping form. Use the 1-2-3 rubrics listed under each "Authentic Assessments" section. Find these forms in this chapter.

Authentic assessment suggestions are provided from three perspectives.

- Portfolio Samples - Teachers assess performance from evidence on actual products in learners' portfolios. e.g.: note cards, outlines, bibliographies.
- Observation Records - Teachers know the performance to be measured; they watch for the actions that indicate learners' performances of skills.
- Performance Tests - Teachers set up a scenario of actions and observations with props and all. Learners perform while they either self-assess or you assess them with criteria for the performances and/or the end products.

• Level 1 • Skills of the Process Assessments

Learner _____
Grade _____ School Year _____

Dates									

Instructor(s) _____

Rubric Scores

• The Thinking and Writing Process •

[Experiences 1-10]										Steps	Skills	Assessment Options
10	9	8	7	6	5	4	3	2	1			
										1-2	• Recall skills with reference tools. [knowledge 1.2]	Portfolio: Bibliography forms display data about sources. Observation: Acquires sources and locates information in them. Performance Test: Uses catalogues, indexes, and cross references to find information.
										3	• Recall ideas from memory. [knowledge 1.1]	Portfolio: Note cards each display one specific fact in non-sentence form. Observation: Acquires sources and locates information in them. Performance Test: Uses catalogues, indexes, and cross references to find information.
										3	• Interpret ideas from text. [comprehension 2.1]	Portfolio: Note cards each display one specific fact in non-sentence form. Observation: Acquires sources and locates information in them. Performance Test: Uses catalogues, indexes, and cross references to find information.
										3a	• Infer meanings with reasons. [analysis 4.2]	Portfolio: Several notes show circled 3's; some display chosen reasons. Observation: Follows strategy for thinking of reasons among facts. Performance Test: Asks questions to infer reasons; then writes some on cards.
										3b	• Infer meanings with likenesses/differences. [analysis 4.2]	Portfolio: Some notes show circled 4's; some display chosen comparisons and/or contrasts. Observation: Follows strategy for thinking of likeness/difference between facts and knowledge. Performance Test: Asks questions to infer likenesses/differences; then writes some on cards.
										3c	• Infer meanings with subject synonyms. [analysis 4.2]	Portfolio: Subject Synonyms form displays listed synonyms and some circled choices. Observation: Follows strategy for thinking of subject synonyms. Performance Test: Asks questions to think of synonyms for a subject.
										4	• Plan categories to form an outline. [synthesis 5.1]	Portfolio: Notes are crisscrossed in stacks with names or initials on Topic lines. Observation: Follows strategy for sorting notes into stacks. Performance Test: Asks questions to sort notes and name stacks as they form.
										5	• Plan major topics in logical list. [synthesis 5.1]	Portfolio: Outline form shows topics in learner's own reasoning. Observation: Follows strategy for arranging topics for a certain audience. Performance Test: Explains reasons for arranging topics for a certain audience.
										6	• Arrange notes in logical order. [synthesis 5.1]	Portfolio: Notes and outline display numbers, listing "1" only once. Observation: Follows strategy for arranging and numbering notes. Performance Test: Forms long column of note-beneath-note, then numbers them.

• Level 2 • Skills of the Process Assessments

Learner _____
Grade _____ School Year _____

Dates

[illegible]

Instructor(s) _____

Rubric Scores

• The Thinking and Writing Process •

[Experiences 1-10]

10	9	8	7	6	5	4	3	2	1	Steps	Skills	Assessment Options
.....	1-2	<ul style="list-style-type: none"> Recall skills with reference tools. [knowledge 1.2] 	<p>Portfolio: Bibliography forms display data about sources.</p> <p>Observation: Acquires sources and locates information in them.</p> <p>Performance Test: Uses catalogues, indexes, and cross references to find information.</p>
.....	3	<ul style="list-style-type: none"> Recall ideas from memory. [knowledge 1.1] 	<p>Portfolio: Note cards each display one specific fact in non-sentence form.</p> <p>Observation: Acquires sources and locates information in them.</p> <p>Performance Test: Uses catalogues, indexes, and cross references to find information.</p>
.....	3	<ul style="list-style-type: none"> Interpret ideas from text. [comprehension 2.1] 	<p>Portfolio: Note cards each display one specific fact in non-sentence form.</p> <p>Observation: Acquires sources and locates information in them.</p> <p>Performance Test: Uses catalogues, indexes, and cross references to find information.</p>
.....	3a	<ul style="list-style-type: none"> Infer meanings with reasons. [analysis 4.2] 	<p>Portfolio: Several notes show circled 3's; some display chosen reasons.</p> <p>Observation: Follows strategy for thinking of reasons among facts.</p> <p>Performance Test: Asks questions to infer reasons; then writes some on cards.</p>
.....	3b	<ul style="list-style-type: none"> Infer meanings with likenesses/differences. [analysis 4.2] 	<p>Portfolio: Some notes show circled 4's; some display chosen comparisons and/or contrasts.</p> <p>Observation: Follows strategy for thinking of likeness/difference between facts and knowledge.</p> <p>Performance Test: Asks questions to infer likenesses/differences; then writes some on cards.</p>
.....	3c	<ul style="list-style-type: none"> Infer meanings with sentence structure. [analysis 4.2] 	<p>Portfolio: Several notes show planned sentence pattern numbers, upper-left.</p> <p>Observation: Follows strategy for planning sentence pattern variations.</p> <p>Performance Test: Reads parts in varied order to choose and write a sentence pattern on card.</p>
.....	3d	<ul style="list-style-type: none"> Infer meanings with subject synonyms. [analysis 4.2] 	<p>Portfolio: Subject Synonyms form displays listed synonyms and some circled choices.</p> <p>Observation: Follows strategy for thinking of subject synonyms.</p> <p>Performance Test: Asks questions to think of synonyms for a subject.</p>
.....	4	<ul style="list-style-type: none"> Plan categories to form an outline. [synthesis 5.1] 	<p>Portfolio: Notes are crisscrossed in stacks with names or initials on Topic lines.</p> <p>Observation: Follows strategy for sorting notes into stacks.</p> <p>Performance Test: Asks questions to sort notes and name stacks as they form.</p>
.....	5	<ul style="list-style-type: none"> Plan major topics in logical list. [synthesis 5.1] 	<p>Portfolio: Outline form shows topics in learner's own reasoning.</p> <p>Observation: Follows strategy for arranging topics for a certain audience.</p> <p>Performance Test: Explains reasons for arranging topics for a certain audience.</p>

• Level 2 •

Rubric Scores

[Experiences 1-10]

• The Thinking and Writing Process •

10	9	8	7	6	5	4	3	2	1	Steps	Skills	Assessment Options
.....	6	•Write a topic statement for each topic. [synthesis 5.1]	Portfolio: Outline form shows topic sentences, each with topic and the subject (or referents). Observation: Follows strategy for writing topic sentences. Performance Test: Writes topic sentences with subject and topic (or referents) in varied order.
.....	7	•Arrange notes in logical order. [synthesis 5.1]	Portfolio: Notes and outline display numbers, listing "1" only once. Observation: Follows strategy for arranging and numbering notes. Performance Test: Forms long column of note-beneath-note, then numbers them.
.....	8	•Write in form to audience for purpose . [synthesis 5.1]	Portfolio: Document has introductory, concluding paragraphs; transitions and topic sentences. Observation: Follows strategy for writing a document from a planned outline and notes. Performance Test: Writes a document with an introduction, topic sentences, and conclusion.
.....	9	•Prepares special pages in document. [synthesis 5.1]	Portfolio: Title page, outline, and bibliography are in order. Observation: Follows strategy for preparing and arranging pages. Performance Test: Prepares and arranges pages in a document.
.....	10	•Judges document with listed criteria . [evaluation 6.1]	Portfolio: First draft shows marks and changes from self-questioning and self-checking strategies. Observation: Follows strategy for finding errors and making revisions. Performance Test: Uses criteria on Question and Check forms to find errors and make changes.
.....	10	•Judges document form, audience, and purpose . [evaluation 6.2]	Portfolio: Document has introductory and concluding paragraphs; transitions and topic sentences. Observation: Follows strategy for writing a document from a planned outline and notes. Performance Test: Writes a document with an introduction, topic sentences, and conclusion.
.....	All	•Manages time and order of spaces and materials.	Portfolio: Envelope and forms display orderliness. Observation: Uses time for work; clears space for work; maintains forms and sources. Performance Test: Notes and uses time; clears spaces for work; maintains orderliness of materials.
.....	All	•Applies skills of working with others .	Portfolio: _____ Observation: Offers and hears thinking through thought-processing and proofreading. Performance Test: _____
.....			
.....			

• Level 3 • Skills of the Process Assessments

Learner _____
Grade _____ School Year _____

Dates

[illegible]

Instructor(s) _____

Rubric Scores

[Experiences 1-10]

• The Thinking and Writing Process •

Experiences 1-10										Steps	Skills	Assessment Options
										1-2	<ul style="list-style-type: none"> Recall skills with reference tools. [knowledge 1.2] 	<p>Portfolio: Bibliography forms display data about sources.</p> <p>Observation: Acquires sources and locates information in them.</p> <p>Performance Test: Uses catalogues, indexes, and cross references to find information.</p>
										3	<ul style="list-style-type: none"> Recall ideas from memory. [knowledge 1.1] 	<p>Portfolio: Note cards each display one specific fact in non-sentence form.</p> <p>Observation: Acquires sources and locates information in them.</p> <p>Performance Test: Uses catalogues, indexes, and cross references to find information.</p>
										3	<ul style="list-style-type: none"> Interpret ideas from text. [comprehension 2.1] 	<p>Portfolio: Note cards each display one specific fact in non-sentence form.</p> <p>Observation: Acquires sources and locates information in them.</p> <p>Performance Test: Uses catalogues, indexes, and cross references to find information.</p>
										3a	<ul style="list-style-type: none"> Translate meanings with examples. [comprehension 2.5] 	<p>Portfolio: Some notes show circled 5's; a few display planned examples.</p> <p>Observation: Follows steps for translating by thinking of examples.</p> <p>Performance Test: Asks questions to infer translations of meanings with examples.</p>
										3b	<ul style="list-style-type: none"> Translate meanings with definitions. [comprehension 2.5] 	<p>Portfolio: Several notes show circled 6's; some display planned definitions.</p> <p>Observation: Follows strategy for thinking of definitions for special terms.</p> <p>Performance Test: Asks questions to select special terms, then writes common definitions.</p>
										3c	<ul style="list-style-type: none"> Infer meanings with reasons. [analysis 4.2] 	<p>Portfolio: Several notes show circled 3's; some display chosen reasons.</p> <p>Observation: Follows strategy for thinking of reasons among facts.</p> <p>Performance Test: Asks questions to infer reasons; then writes some on cards.</p>
										3d	<ul style="list-style-type: none"> Infer meanings with likenesses/differences. [analysis 4.2] 	<p>Portfolio: Some notes show circled 4's; some display chosen comparisons and/or contrasts.</p> <p>Observation: Follows strategy for thinking of likeness/difference between facts and knowledge.</p> <p>Performance Test: Asks questions to infer likenesses/differences; then writes some on cards.</p>
										3e	<ul style="list-style-type: none"> Infer meanings with sentence structure. [analysis 4.2] 	<p>Portfolio: Several notes show planned sentence pattern numbers, upper-left.</p> <p>Observation: Follows strategy for planning sentence pattern variations.</p> <p>Performance Test: Reads parts in varied order to choose and write a sentence pattern on card.</p>
										3f	<ul style="list-style-type: none"> Infer meanings with subject synonyms. [analysis 4.2] 	<p>Portfolio: Subject Synonyms form displays listed synonyms and some circled choices.</p> <p>Observation: Follows strategy for thinking of subject synonyms.</p> <p>Performance Test: Asks questions to think of synonyms for a subject.</p>

Dates

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• **Level 3** •

Rubric Scores

[Experiences 1-10]

- The Thinking and Writing Process •

10	9	8	7	6	5	4	3	2	1	Steps	Skills	Assessment Options
										4	<ul style="list-style-type: none"> Plan categories to form an outline. [synthesis 5.1] 	<p>Portfolio: Notes are crisscrossed in stacks with names or initials on Topic lines.</p> <p>Observation: Follows strategy for sorting notes into stacks.</p> <p>Performance Test: Asks questions to sort notes and name stacks as they form.</p>
										5	<ul style="list-style-type: none"> Plan major topics in logical list. [synthesis 5.1] 	<p>Portfolio: Outline form shows topics in learner's own reasoning.</p> <p>Observation: Follows strategy for arranging topics for a certain audience.</p> <p>Performance Test: Explains reasons for arranging topics for a certain audience.</p>
										6	<ul style="list-style-type: none"> Write an introductory paragraph. [synthesis 5.1] 	<p>Portfolio: Paragraph shows subject in first sentence and ordered topics in remaining sentences.</p> <p>Observation: Follows strategy for writing an introductory paragraph.</p> <p>Performance Test: Writes paragraph to introduce the subject and order of topics on outline.</p>
										7	<ul style="list-style-type: none"> Write a topic statement for each topic. [synthesis 5.1] 	<p>Portfolio: Outline form shows topic sentences, each with topic and the subject (or referents).</p> <p>Observation: Follows strategy for writing topic sentences.</p> <p>Performance Test: Writes topic sentences with subject and topic (or referents) in varied order.</p>
										8	<ul style="list-style-type: none"> Plan subcategories to complete outline. [synthesis 5.1] 	<p>Portfolio: Notes are in substacks and have either names or initials on Subtopic lines.</p> <p>Observation: Follows strategy for sorting notes into substacks.</p> <p>Performance Test: Asks questions to sort notes and name substacks as they form.</p>
										9	<ul style="list-style-type: none"> Arrange notes in logical order. [synthesis 5.1] 	<p>Portfolio: Notes and outline display numbers, listing "1" only once.</p> <p>Observation: Follows strategy for arranging and numbering notes.</p> <p>Performance Test: Forms long column of note-beneath-note, then numbers them.</p>
										10	<ul style="list-style-type: none"> Write in form to audience for purpose. [synthesis 5.1] 	<p>Portfolio: Document has introductory, concluding paragraphs; transitions and topic sentences.</p> <p>Observation: Follows strategy for writing a document from a planned outline and notes.</p> <p>Performance Test: Writes a document with an introduction, topic sentences, and conclusion.</p>
										11	<ul style="list-style-type: none"> Prepares special pages in document. [synthesis 5.1] 	<p>Portfolio: Title page, outline, and bibliography are in order.</p> <p>Observation: Follows strategy for preparing and arranging pages.</p> <p>Performance Test: Prepares and arranges pages in a document.</p>
										12	<ul style="list-style-type: none"> Judges document with listed criteria. [evaluation 6.1] 	<p>Portfolio: First draft shows marks and changes from self-questioning and self-checking strategies.</p> <p>Observation: Follows strategy for finding errors and making revisions.</p> <p>Performance Test: Uses criteria on Question and Check forms to find errors and make changes.</p>
										12	<ul style="list-style-type: none"> Judges document form, audience, and purpose. [evaluation 6.2] 	<p>Portfolio: Document has introductory and concluding paragraphs; transitions and topic sentences.</p> <p>Observation: Follows strategy for writing a document from a planned outline and notes.</p> <p>Performance Test: Writes a document with an introduction, topic sentences, and conclusion.</p>

• Reading Writer's Guides • Learner _____ **Assessments** Grade _____ School Year _____

Instructor(s) _____

Reading Skills	Basic Instructions Dates	Specific Instructions Dates
Graphic Interpretation Bold and Italic Type •reads to follow •explains reason for type		
Headings and Subheadings •reads related headings		
Letters and Numbers •explains outlining order		
Margins •explains indentions		
Columns •follows order of columns		
Bullet Symbols •explains purpose of bullets		
Illustrations •reads and explains •reads and matches to print		
Verbal (Print) Interpretation Printed Instructions •reads and explains •reads and follows		
Headings and Subheadings •reads and predicts •reads and follows		
Printed Directions •reads and explains •reads and follows		
Captions •reads and matches illustrations •reads and follows		
Video Interpretation Demonstrated Instructions •views and explains •views and follows Printed Frames •reads and explains		Rubric •1 = not yet, should work on ____? •2 = somewhat consistent, should improve ____? •3 = consistent, will continue to apply.

• **Spelling Demons** •

Learner _____

Grade _____ School Year _____

Instructor(s) _____

Spelling Connections

Common Spelling Demons in Sentences with Clues

These are some words that hundreds of writers have misspelled. Help yourself to "fix" your own spelling demons by learning a clue to their spellings. Perhaps the clues in these sentences will help you, or perhaps you will make your own connections to spellings. Find one or two spelling demons in each of your documents, and connect each demon to a clue. Write clues in the back of your journal, and often practice them with a friend.

a lot	A LITTLE leads to A LOT.	mosquitoes	MosQUIToes never QUIT biting.
accept	ACcept is an ACtion.	niece	My Niece is Nice.
ache	The E at the end of achE makes a long A.	o'clock	O'clock means On the Clock.
adult	U will become an adUlt.	our	OUR and yOUR are cousins.
affect	The A in Affect means an Action.	parallel	Parallel is 2 then 1 L.
arctic	The ARC at the top of earth makes an ARctic place.	prairie	The AIR on the prAIRie is fresh.
believe	Never beLIEve a LIE.	prey	Animals Eat prEy.
breathe	HE could breatHE.	principal	The princiPAL is a PAL.
built	U and I bUilt that bUilding.	recommend	I recoMMend M&M's.
camouflage	CamOUflage the OUtside.	sigh	The G in siGh gets in the way of the h.
capital	CapitAl letters are Abc. CapitAl cities are Active.	sign	The G in siGn gets in the way of the n.
capitol	The capitOl has a dOme. CapitOl is mOney.	ski	I like to skl.
choose	ChOOse an extra O so you won't have a long O.	spaghetti	HE loves spagHEtti.
chose	ChOse has a long O because it has Only one.	spatial	A "T" is in the middle of spaTial.
climb	ClimB a Branch.	stationary	StationAry stAys in pLAce.
collect	CoLLect an extra L.	stationery	StationEry sEnds a lETter.
color	We love to see cOlOr.	subtle	The B in suBtle is suBtle.
consistent	The TENT stood consistENTly.	than	ThAn compAres.
desert	The deSert was deSerted by an S.	then	ThEn tells wHen.
dessert	Strawberry Shortcake gives deSSert an extra S.	there	HERE and tHERE tell wHERE.
does	Does and goes are cousins of the "es" family.	they	HE is part of tHEm and tHEY.
fight	When "ight" follows a consonant, it sounds right.	they're	They + are = they're.
fourteen	Four + teen (ten) + four•teen.	threw	Few threw the ball.
friend	I was a friEND to the END.	through	ThROUGH the ROUGH times.
government	Govern + ment makes government.	throw	ThROW a ROW of darts.
hear	You hEAR with your EAR.	ticklish	Tickle the ticklish.
hoping	Hoping has a long O and only one P.	too	An extra "O" means extra and also.
hopping	Hopping hops with a short O.	ugly	That bUG is UGLY.
hour	The H in Hour Holds the clock.	useful	Helpful and useful are wonderful cousins.
huge	The E in HUGE prevents a HUG.	vary	ChAnge Around and vAry with vAriety.
island	An ISland IS land in the middle of water.	wear	Some WEAR EARrings.
it's	Substitute an I with ' to join IT IS.	weigh	It can WEIGH EIGHt pounds.
its	Its is cousin to hers, his, theirs, yours, and ours.	were	"RE" makes aRE and weRE cousins.
meant	I MEANt what I MEAN.	which	WHo and WHich are cousins.
meat	We EAT mEAT.	witch	The wITCH had an ITCH.
medicine	This medIcIne is ICI.		

Four Components That Make Effective Learning Happen

• **Dr. Madeline Hunter's Elements of Instruction** •

Dr. Madeline Hunter. Dr. Madeline Hunter left us gifts for teaching learners. Through her research she proved the causes of effective learning. For years she led a team of educators through arduous tasks of examining the conditions, plans, and behaviors that efficiently cause learners to learn. As a clinical psychologist, applying her expertise to education, she proved truths about learners and learning. Before her research, these truths had been educators' assumptions or hunches. Dr. Hunter organized these significant truths into four parts; she named them, "The Elements of Instruction." Today her proven elements are an umbrella of all that goes into learning.

Elements of Instruction. With the Elements of Instruction, today's educators can professionally make knowledgeable judgments on what to use, what to do, how to do, and how to observe. With Dr. Hunter's discovered truths, educators make decisions based on proven truths that they "know," rather than personal backgrounds that make them "think," "assume," or "feel." Dr. Hunter's umbrella of truths has four parts which she named "The Elements of Instruction." These elements give educators a common perspective and a consistent vocabulary about learning. They serve teams of instructors who share plans and observations; they serve supervisors who observe instructors in action with learners.

Effective educators design, deliver, observe, reflect, and revise. Effective educators focus on the learner and on efficient ways of causing learning. Effective educators make themselves even more effective when they apply scientifically proven truths to teaching and learning. Effective educators find these truths throughout Dr. Hunter's four Elements of Instruction. What she gave us is not new. She made no inventions in teaching. She simply proved and highlighted what works, and she put all that works into one big, organized collection.

These four Elements of Instruction include all that goes into teaching and learning. Two focus on the instructor: **1. Teacher Responsibilities** and **2. Teacher Behavior**; two focus on the learner: **3. Principles of Learning** and **4. Lesson Design**. Each el-

ement breaks into categories, each other.

The Elements of Instruction throughout Chapters 1, 2, and 3. I have woven indicators of Dr. Hunter's Elements into lessons of each step. Throughout Chapters 1-3 each **Teach** section leads instructors through a model of how to teach its step. Each **Teach** section provides a script for instructors to read, to practice, to imitate, and/or to follow. Each **Teach** section displays many examples of Dr. Hunter's four elements. "Lesson Design" steps are labeled above paragraphs. "Teacher Behavior" and "Principles of Learning" are labeled below paragraphs. "Teacher Responsibilities," are implied throughout preparations and scripts. Only some examples are labeled. You might use the following tables to find more. They show you how Elements of Instruction weave into lessons.

I first listed Dr. Hunter's Elements on four of the following pages. Then I made a fifth index page. That give maps of Dr. Hunter's Elements. As I planned the **Teach** sections of Chapters 1, 2, and 3, I followed her Lesson Design and accented my plans with her Principles of Learning. My maps helped me to see the pattern and understand where I was when I was working among their parts. They helped me so much that I have included them for you on the following five pages.

As I planned these lessons, I was repeatedly reminded of Dr. Hunter's words, "Follow the order of the Lesson Design, but if a step is not needed, skip it." So, if learners rush into the room begging for a lesson on the skill of asking, "For what reason," skip the Anticipatory Set. Their minds are ready to learn.

Dr. Madeline Hunter, deceased 1994, lives because of her legacies. She and her team accomplished invaluable feats through their work with the lab school of UCLA's Graduate School of Education. Dr. Hunter's achievements are gifts to us. She has given us what must not be lost, not forgotten, but activated to maintain the "PRO" in our profession.

Dr. Madeline Hunter's *Elements of Instruction* • Table by Thea Holtan • © 2001

Overview: Hunter - Four Elements of Instruction

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1 - Teacher Responsibilities
with Instruction (Table 2)

Planning	<ul style="list-style-type: none"> •long range •short range
Content	<ul style="list-style-type: none"> •scope and sequence •skills and knowledge •learner outcomes
Materials (knowledge and use of resources)	<ul style="list-style-type: none"> •varied •resourceful •long range •familiar
Classroom Management	<ul style="list-style-type: none"> •varied •meets classes' needs •neutral climate •balanced activities •daily responsibility areas
Human Relations	<ul style="list-style-type: none"> •with students •with parents •with staff
Growth and Development of Self	<ul style="list-style-type: none"> •Understand student development. •Develop teaching skills. •Project healthy self-concept.

2 - Teacher Behaviors
in Instruction (Table 3)

Teach to the Objective.	<ul style="list-style-type: none"> •Content •Student Behavior •Relevant Actions <ul style="list-style-type: none"> -relevant information -relevant questions -relevant activities -relevant responses to learners' efforts
Teach to Correct Levels of Difficulty.	<ul style="list-style-type: none"> •Diagnose w/ Bloom's Taxonomy. <ol style="list-style-type: none"> 1. Knowledge 2. Comprehension 3. Application 4. Analysis 5. Synthesis 6. Evaluation •Diagnose w/ Task Analysis. <ol style="list-style-type: none"> 1. Identify essential information. 2. Sequence information. 3. Use appropriate language. •Individualize.
Monitor and Adjust.	<ul style="list-style-type: none"> •Elicit overt response. •Check the response. •Interpret the response. •Adjust the teaching: <ol style="list-style-type: none"> 1. reteach. 2. move on. 3. practice. 4. abandon.
Teach with Lesson Designs to the Principles of Learning.	<ul style="list-style-type: none"> •Lesson Designs •Varied Timing •Teaching Styles •Principles of Learning

3 - Principles of Learning
throughout Instruction (Table 4)

Motivation	<ul style="list-style-type: none"> •level of concern •feeling tone •interest •knowledge of results •success •reward (intrinsic and extrinsic)
Reinforcement	<ul style="list-style-type: none"> •positive reinforcement •extinction (no reinforcement) •negative reinforcement •scheduled reinforcement
Rate and Degree	<ul style="list-style-type: none"> •meaning •active participation •degree of original guidance •hemisphericity •knowledge of results •level of aspiration •modeling (intent) •observational learning •practice schedule •sequence, length, relationship, position •set to learn •positive reinforcement •transfer •vividness
Retention	<ul style="list-style-type: none"> •meaning •degree of original learning •feeling tone •practice schedule •transfer
Transfer	<ul style="list-style-type: none"> •similarity •association •degree of original learning •critical attributes •applied thinking •built into instruction

4 - Lesson Design
for Instruction (Table 5)

Readiness	<ol style="list-style-type: none"> 1. Anticipatory Set 2. Objective (the purpose or goal)
Information	<ol style="list-style-type: none"> 3. Input 4. Modeling (showing examples)
Assessment	<ol style="list-style-type: none"> 5. Checking for Understanding 6. Guided Practice 7. Independent Practice <p>The Lesson Design lists seven stages of effective performance learning. Depending on the status of learners, it can be used in part, in full, or stretched through a period of two or more sessions. Example 1: If students ask to learn something, an "anticipatory set" is not necessary. Example 2: You might present the "anticipatory set," "objective," and "input" on one day; then present the remaining four steps on following day or days.</p>

Dr. Madeline Hunter's Element 1: Teacher Responsibilities • Table by Thea Holtan • © 2001

Planning	Content	Materials [knowledge and use of resources]	Classroom Management	Human Relations	Growth and Development of Self
<ul style="list-style-type: none"> •long-range plans •short-range plans 	<ul style="list-style-type: none"> •scope and sequence <ul style="list-style-type: none"> -total scope of skills and knowledge -sequential arrangement of skills and knowledge •skills and knowledge <ul style="list-style-type: none"> -acquiring basic skills -applying basic skills to knowledge •learner outcomes <ul style="list-style-type: none"> -applying basic skills to knowledge (the basis of "authentic assessment") 	<ul style="list-style-type: none"> •varied •resourceful •long range •familiar 	<ul style="list-style-type: none"> •varied, based on group •classes' needs <ul style="list-style-type: none"> -Use a huge repertoire of cognitive teaching skills. -Use many motivational techniques. •neutral climate <ul style="list-style-type: none"> -Discourage socialization and free movement. -Encourage exploration of ideas and concepts. •balance of activities <ul style="list-style-type: none"> -controlled by teacher -self-directed by student -cooperatively directed by students •daily responsibility areas <ul style="list-style-type: none"> -instructing -assessing -communicating -care taking 	<ul style="list-style-type: none"> •with students <ul style="list-style-type: none"> -Establish performance expectations and standards. -Expect positive outcomes. -Believe students will succeed. -Give challenging work with successes to stretch and apply the skills of the successes. -Reward them extrinsically to build intrinsic rewards. (See Table 4: Principles, Reinforcement- Positive) •Use social rewards often (sincere statements). •Use privilege rewards sometimes ("get to do's"). •Use concrete token rewards occasionally (things). •with parents •with staff 	<ul style="list-style-type: none"> •Understand student development. <ul style="list-style-type: none"> -Analyze your own lessons. -Spontaneously utilize the Principles of Learning. -Perceive teaching in terms of cause/effect relationships. -Match teaching strategies to groups, based on grade level, learning task, and socioeconomic status. -Match teaching strategies to learning styles. •Develop teaching skills. <ul style="list-style-type: none"> -Improve teaching in own style. -Strengthen effectiveness. -Gather observation assessments to evaluate performance. -Gather student survey assessments to evaluate performance. -Critique through conferences. -Improve with inservice education. -Apply appropriate strategies to students under specific circumstances (key factor). •Project a healthy self-concept. <ul style="list-style-type: none"> -leads to healthy attitudes toward school -produces better self-concepts among students

Dr. Madeline Hunter's Element 2: Teacher Behaviors • Table by Thea Holtan • © 2001

Teach to the Objective

•Content

Focus constantly on the skill that you want students to learn by the end of the lesson.

•Student Behavior

Observe what students do and say through your lesson as they are learning the skill.

•Relevant Teacher Actions

1. Provide relevant information.
2. Ask relevant questions.
3. Assign relevant activities.
4. Give relevant responses to learners' efforts.
5. Dignify learners' erroneous responses.

- Weave your plan tightly to focus directly on the skill being learned.
- Stick to the plan to spare students any distractions from what they are learning how to do.
- Avoid meaningless digressions (birdwalking) and disjointed information (unrelated bits of knowledge).
- Avoid disordered lessons (not sequenced from simple to complex).
- Clarify to yourself the level of difficulty to which you will be teaching.
- Plan with a focus on the correct level of difficulty and stick to your plan, unless monitoring the performances shows you that you must adjust your delivery.

Example:

Students have already performed their "For what reason?" question on a set of notes from a social studies unit. They then demonstrated understandings of how to think of reasons. At this time you want them to apply their skill to information that they heard from a news feature and/or a lyceum speaker.

Teach to the Correct Levels of Difficulty

•Diagnose performance with Bloom's Taxonomy.

1. **Knowledge:** find, recognize, recall info'.
2. **Comprehension:** say in own words; give examples; see relationships among ideas.
3. **Application:** use skills in new situations.
4. **Analysis:** break into parts; compare and contrast the parts; consciously reason.
5. **Synthesis:** make new whole; create.
6. **Evaluation:** support conclusions of a position on a "no right or wrong" issue.

Observe what each student does and says while learning the skill of the lesson.

If the skill is being introduced to students, plan the lesson at their knowledge of the skill. As they learn and develop the skill ("Monitor"), they will be able to apply it to knowledge at higher levels of thinking. Be ready to "Adjust." (See column, right, #4)

•Diagnose performance with task analysis.

1. Identify the essential information of the task.
2. From simple to complex, sequence the essential information of the task.
3. Use language appropriate to the student.

•Individualize.

Have a clear idea of what you're expecting from each student. Always be alert, ready to make split-second decisions based on feedback and observations of each performance, "Monitor". Be ready to "Adjust." (See column, right, #4)

Watch skill learning; question yourself:

- "Shall I move on to the next step?"
- "Do the students know it with certainty?"
- "Do they know it, but without certainty?"
- "Shall I give more examples?"
- "Shall I break it down to finer steps?"
- "Do they not know it?"
- "Is this an instance when I should drop it and at another time come back to it?"

Monitor and Adjust the Teaching of the Skill

[Aiming at a target and knowing if you hit it.]

1. Elicit overt responsive behaviors.

While assessing these responses, determine the Correct Level of Difficulty (See column, left, Bloom)

2. Check the responsive behaviors.

•On or off task? •Listening? •Wandering?

3. Interpret the responsive behaviors.

•No problem? Problem with the task?
•Problem with the teaching?

Consider the following possibilities:

(see Principles of Learning, Table 4)

•Perhaps Motivational techniques are needed. You might raise the level of concern with temporary stress. (Alter the feeling tone of the room from pleasant to unpleasant, then back to pleasant again.)

•Perhaps positive or negative Reinforcement techniques would strengthen the lesson.

(See Lesson Design, Table 5)

•Perhaps more Modeling would clarify (correctly demonstrating the skills).

•Perhaps again Check for Understanding.

•Now you might initiate Guided Practice.

•Perhaps Independent Practice is fitting.

•Always Individualize (see column, left), keeping everyone functioning in the classroom.

4. Adjust the teaching. Use appropriate Principles or Lesson Design steps to fit the need of learning the lesson's skill.

(See Tables 4 and 5)

1. Reteach differently.
2. Move on, continuing the lesson.
3. Practice, altering the task.
4. Abandon, to return at another time.

Teach with Lesson Design Steps and The Principles of Learning

Lesson Design (See Table 5)

•Seven Steps of Lesson Design

1. Anticipatory Set
2. Objective
3. Input
4. Modeling
5. Checking for Understanding
6. Guided Practice
7. Independent Practice

•**Teaching Styles:** The seven Lesson Design steps list the process for effective teaching of skills. They are intended to strengthen teaching skills in whatever style each teacher may use.

•**Varied Timing:** To teach a skill, the seven Lesson Design steps could all take place on the same day. However, they might take place for several days. Also, all seven of the steps will not always be needed for teaching each and every skill. (e.g.: If students are excited about learning how to do something, they will not need an anticipatory set.)

Principles of Learning (See Table 4)

Let the five Principles of Learning be your guide. These principles provide you with proven teaching options. Based on students' skill learning, these Principles and the Lesson Design steps steer you toward effective Teacher Behaviors.

•Five Principles of Learning

1. Motivation
2. Reinforcement
3. Rate and Degree
4. Retention
5. Transfer

Dr. Madeline Hunter's Element 3: Principles of Learning • Table by Thea Holtan • © 2001

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Element 3: Hunter - Principles of Learning

Element 3 • Principles of Learning - Table 3

Motivation	Reinforcement	Rate and Degree	Retention	Transfer
<ul style="list-style-type: none"> • level of concern <ul style="list-style-type: none"> -too high, too low, appropriate -lower, raise, maintain -some (focus), none (no motivation), too much (distracts) • feeling tone [perceived environment] <ul style="list-style-type: none"> -expressed in facial and body language -pleasant tone = motivation -unpleasant tone = focus -neutral tone = no effect -use pleasant tone; use unpleasant tone to focus; then again use pleasant tone • interest [attracts, stimulates, involves] <ul style="list-style-type: none"> -life-related meaningfulness -active participation; active forecasting -vivid, novel, different holds interest e.g.: examples, role playing, stories, humor, sharing varied results • knowledge of results <ul style="list-style-type: none"> [defines, cautions, predicts, assures] -specific and immediate -models, demonstrations first of right way, then of wrong way to do a task -affirm results: feed appraisals back with exclamations, approvals, praises, and compliments • success <ul style="list-style-type: none"> -level of difficulty: appropriate -orientation: where, when, time to do -feedback: tells learners of successes -correction: upper achievers need 75% success focus; others need 99% • reward (intrinsic - extrinsic) <ul style="list-style-type: none"> relation of activity to goal 	<p>[Action taken to strengthen or weaken a behavior.]</p> <ul style="list-style-type: none"> • extinction <ul style="list-style-type: none"> -no reinforcement • positive reinforcement <ul style="list-style-type: none"> -adds to behavior -strengthens the response that it follows -accomplished first with social rewards (sincere statements as often as possible); next with privilege rewards (favored activities); last with concrete rewards (tokens, tangible items). • negative reinforcement <ul style="list-style-type: none"> -taken away -accompanied by clarification of the correct behavior -dignifies an erroneous response • scheduled reinforcement <ul style="list-style-type: none"> -scheduled regularly for establishing a new behavior -scheduled intermittently for strengthening a previously learned behavior 	<ul style="list-style-type: none"> • meaning <ul style="list-style-type: none"> -(See Principle, Retention) • active participation <ul style="list-style-type: none"> (See: Principle, Motivation, Interest) -consistent involvement on the task -covert (not observable) "think about" -overt (observable) "list, show, share" -participation from covert to overt • degree of original guidance <ul style="list-style-type: none"> -(See Lesson Design, Guided Practice) • hemisphericity <ul style="list-style-type: none"> -engages 2 hemispheres of the brain • knowledge of results <ul style="list-style-type: none"> -(See Principle, Motivation) • level of aspiration: self-motivated • modeling (intent) <ul style="list-style-type: none"> -(See Lesson Design, Modeling) • observational learning (witnessing) • practice schedule <ul style="list-style-type: none"> -(See Principle, Reinforcement) • sequence, length, relationship, position (of the skill being learned) • mind set to learn <ul style="list-style-type: none"> -(See Lesson Design, Anticipatory Set) • positive reinforcement <ul style="list-style-type: none"> -(See Principle, Reinforcement) • transfer <ul style="list-style-type: none"> -(See Principle, Transfer) • vividness <ul style="list-style-type: none"> -(See Principle, Interest) 	<ul style="list-style-type: none"> • meaning: <ul style="list-style-type: none"> -relationship of new learning to student's past experiences • degree of original learning: <ul style="list-style-type: none"> -affected by rate and degree of learning -(See Principle, Rate and Degree) • feeling tone: <ul style="list-style-type: none"> -affected by feeling tone -(See Principle, Motivation) • practice schedule <ul style="list-style-type: none"> -(See Principle, Reinforcement) • transfer: <ul style="list-style-type: none"> -shown in ability to transfer -(See Principle, Transfer) 	<ul style="list-style-type: none"> • similarity: <ul style="list-style-type: none"> -likenesses between factors • association: <ul style="list-style-type: none"> -connection across time • degree of original learning: <ul style="list-style-type: none"> -affected by rate and degree of learning -(See Principle, Rate and Degree) • critical attributes: <ul style="list-style-type: none"> -special factors • applied thinking: <ul style="list-style-type: none"> -stretches thinking • built into instruction: <ul style="list-style-type: none"> -increases frequency

Dr. Madeline Hunter's Element 4: Lesson Design • Table by Thea Holtan • © 2001

Readiness

1. Anticipatory Set: focuses students' attention on the lesson.

Effects: [increases principles of motivation and retention (See Table 4) and makes efficient use of class time [management]. (See Table 2)

Descriptors: -usually brief
-can be motivational
-can be a review
-can be a quick assessment of behavior, skill, or knowledge

Examples:

- a. Write on the board before students enter the room:
"Choose three of your notes and be ready to share them aloud in class." [raises level of concern (See Table 4); increases state of readiness (anticipatory set)]
- b. Have students pick up handouts as they enter:
"While I am taking role, read your notes.
Be ready to share five of them aloud."
[increases state of readiness (anticipatory set)]

2. Objective (purpose or goal): gives sense of direction.

Effects: gives students what they will learn and why it is important or relevant to them. [accelerates rate of learning (See Table 4)]

Descriptors: -directs teacher and students to same goal
-stated at the beginning
-stated in clear terms

Examples:

- a. (from "a" above) Tell learners, "Our goal for today is to think of reasons that connect some of your notes to one another."
- b. (from "b" above) Tell learners, "Today you will stretch your understandings of your notes. You will question yourself, think, and connect some notes to reasons."

Information

3. Input: provides key information and/or structures the environment needed for the objective.

Effect: gives students appropriate instructions for the goal.

Descriptors: -follows Anticipatory Set's assessment
-uses lecture, discussion, demonstration
-can use materials (book, video, chart, etc.)
-organize, present in simplest manner
-presented in simple-to-complex sequence
-next, model what the information or process is
-clarifies critical points for performing the skill
-meaningful tasks ease learning
-bridges knowledge and practice of the skill
-establishes relationship between new and previous information

Example:

"You are now ready to think about possible reasons for some notes. Begin with your top note card. First read the note aloud, then add the question, "For what reason?" Think about the question, and try to answer it. If you cannot think of a reason, go on the next card; however if you can think of a reason, simply circle the 3 on the note card. Later, you will choose some of the reasons and write them on their cards. They will be ready for you when you write your document."

4. Modeling: shows students what they are expected to do.

Effect: gives students a demonstration or a model of how to do what has been given as input toward the goal.

Descriptors: -example is a form of modeling, give several
-shows a replica of the skill
-stresses key points, critical focuses or cues for successful performance
-must be done correctly the first time
-makes vivid impact on student
-achieves more with several models

Example:

Assuring students that volunteers will only ask, not answer, a question, the instructor asks volunteers to read a note aloud, and add, "For what reason?" The group share answers.

Assessment

5. Checking for Understanding: provides feedback from students, indicating levels of understanding; prevents teachers from commencing when students are lost or uncertain.

Effect: catches incomplete communication of the lesson.

Descriptors: -signaled response
-choral response
-personal response

Example using a note on a transparency:

Tell the group, "All together, aloud, read the parts on this card to make a question that asks for reasons."

6. Guided Practice: provides monitored practice with the teacher present to give immediate feedback.

Effects: reinforces new learning and catches errors early.

Descriptors: -first practice is best when accurate as possible
-specific feedback of correct and incorrect skills
-prevents learning of incorrect motor patterns
-"mass" for new skill, several short times, close
-"mass" for correct answers and good thinking
-"distributive" for familiar, timed apart
-"distributive" for speed, fluency, automation
-intensity, lightened with interspersing activity

Example:

Tell everyone to read notes with the question for reasons and to circle the 3 on note cards that have reasons. After finding three notes with circled 3's, they should raise their hands.

7. Independent Practice: provides students the opportunity to apply the learned skill without being monitored.

Effects: allows for application of new learning without major errors, discomfort, or confusion.

Descriptors: -homework or written test
-independent assignment
-use of skill for other applications

Example:

After having asked reasons of each note from their social studies text, students apply this skill by first writing notes from a science unit, then processing them with the "For what reason?" question and a circle around the answered 3's.

Taxonomy of Cognitive (Thinking) Skills

• Dr. Benjamin Bloom's Taxonomy of Cognitive Skills •

Dr. Benjamin Bloom. The name "Bloom" is known in all fields of professional education. Dr. Benjamin Bloom focused on learners' thinking performances. He listed them in graduating degrees of complexity; he established and named six graduating categories of thinking. In 1956, he published his list in a taxonomy of thinking skills which is now known as "Bloom's Taxonomy of the Cognitive Domain." He shared discoveries of how to challenge and inspire thinking processes for learners. His taxonomy of thinking actions has transcended through the years, as a strong resource for the planning educator.

Effects of Bloom on other taxonomies. His focus on the learner's cognitive domain invited studies of the other domains. For the next twenty-five years taxonomies of other domains have been explored and produced. Taxonomies have been produced for the affective domain, the psychomotor domain, the moral development domain, and even the experiential domain.

Taxonomy of Cognitive Skills

- 1.0 Knowledge
- 2.0 Comprehension
- 3.0 Application
- 4.0 Analysis
- 5.0 Synthesis
- 6.0 Evaluation

Bloom's Taxonomy throughout Chapters 1, 2, and 3. In each "Account for Learned Skills" section of Chapters 1, 2, and 3 the "Intellectual Arts" skills are listed by Dr. Bloom. Each "Communication

Arts" skill is prefaced by an abbreviation of one of his six levels of thinking: 1.0 Knowledge, 2.0 Comprehension, 3.0 Application, 4.0 Analysis, 5.0 Synthesis, and 6.0 Evaluation. Communication Arts skills are cross referenced with Bloom on Tables 1 - 11 of pages 0•18-47.

Bloom's Taxonomy on Tables 1-11. Tables 1 and 2 (pages 0•18-19) display this *Process* skills as they are arranged by Dr. Bloom's six cognitive (thinking) levels. These tables show decimal numbers for placing skills on his "1 - to - 6+" scale. These tables clearly illustrate the high levels of thinking that learners perform by simply following this Thinking and Writing Process.

Dr. Bloom's six cognitive levels are also illustrated on Tables 3-11, columns 1 and 2. They identify the thinking levels of each step of this process. The Language Arts Skills follow the numerical order of the process' steps; they are supported with options for assessing them. All of these are displayed with a thinking level and a thinking skill from Dr. Bloom's "Taxonomy of Cognitive Skills."

Bloom's Taxonomy Ordering Tables 3-11. Tables 3-11 display skills in seven stages of development. The seventh stage focuses on the social domain. However, the first six stages focus on the development as cited by Dr. Bloom. 1. Learning, 2. Performing, 3. Applying, 4. Transferring, 5. and 6. Performing and Applying. (See also pages 0•17-17)

for the skills of thinking (a) at all levels, (b) with all applications, and (c) to all complexities. Dr. Benjamin Bloom has given us a foundation with which we can be accountable to learners.

• Examples of Skills in Bloom's Taxonomy •

Bloom's Taxonomy	Examples	Steps
• Remembering previously learned strategies •		
1.00 Knowledge		Notes
1.10 Knowledge of Specifics		Notes
1.11 Knowledge of Terminology	Knows terms and referents.	Process
1.12 Knowledge of Specific Facts	Knows specific facts.	Ref. Skills
1.20 Knowledge of Ways of Dealing with Specifics	Knows steps to take.	Notes
1.21 Knowledge of Conventions	Knows rules, symbols, and tools.	Ref. Skills
1.22 Knowledge of Sequences, Trends	Knows actions, influences, trends.	Notes
1.23 Knowledge of Classification and Categories	Knows organization and divisions.	Notes
1.24 Knowledge of Criteria	Knows criteria and qualifiers.	Notes
1.25 Knowledge of Methodology	Knows methods, procedures, treatments.	Notes
1.30 Knowledge of Universals and Abstractions in a Field		
1.31 Knowledge of Principles and Generalizations	Knows laws, fundamentals, implications.	Notes
1.32 Knowledge of Theories and Structures		
• Grasping the meaning of material •		
2.00 Comprehension		Examples
2.10 Comprehension through Translations	Translates, illustrates, rephrases meanings.	Definitions
2.20 Comprehension through Interpretations	Interprets relevancies, relationships.	Notes
2.30 Comprehension through Extrapolations	Infers meanings; anticipate endings.	Topics
• Using learned material in new and concrete situations •		
3.00 Application	Transfers, uses strategy, law, conclusion.	Subject Synonyms
• Taking material apart to examine its content and structure •		
4.00 Analysis		Sentence Patterns
4.10 Analysis of Elements	Distinguishes parts and inferences.	Topics
4.20 Analysis of Relationships	Deduces cause-effects and comparisons.	Note #'s
		Subtopics
		Reasons
		Like/Differ
4.30 Analysis of Organizational Principles	Detects techniques, arrangement, bias.	Apply to Text
• Putting parts together to form a new whole •		
5.00 Synthesis		Outline
5.10 Synthesis through Producing a Unique Communication	Writes, tells an organized document.	Intro. Para.
		Topic Sent.
		Document
		Parts of Doc.
5.20 Synthesis through Producing a Plan or a Proposed Set of Operations	Proposes a plan to solve a problem.	
5.30 Synthesis through Producing a Set of Abstract Relations	Combines concepts and perceptions.	
• Judging the value of material for a given purpose •		
6.00 Evaluation		
6.10 Evaluative Judgments with Criteria of Internal Standards	Assesses accuracies and structure.	Final Doc.
6.20 Evaluative Judgments with Criteria of External Standards	Assesses purpose and form.	Final Doc.

Strategies of Questions That Cause Learners To Think

• Dr. Hilda Taba's Open Focusing Questions •

Dr. Hilda Taba. Of all who have influenced me and my teaching, Hilda Taba scores the highest. She left with us an invaluable set of tools for use with all knowledge and information. She designed for us a clear, systematic set of questions which can be asked in an open way that makes learners think, share, discuss, and grow. Her design gives educators the ability to organize teaching in ways that openly and actively involve learners. Her questions invite learners to listen, think, connect, respond, and share. These questions systematically follow Dr. Bloom's taxonomy of cognitive (thinking) skills, beginning with recall of facts and progressing through interpretations, generalizations, and applications of generalizations. Dr. Taba's questions even apply to social and emotional situations, causing learners to think rationally, rather than to react emotionally.

Open Focusing Questions and Group Discussion Dynamics. Dr. Hilda Taba led educators in teachings of the social sciences. Through her teaching and research at Berkeley University she recognized how poorly learners understood concepts of the social sciences. She studied what caused some learners to engage in discussions at high levels of thinking. She observed what teachers asked that sparked open discussions at high levels of thinking. Strategically she created a scheme of open questions for causing discussions at high levels of thinking. She created a training course for teachers and a training course for leaders of teachers. Districts throughout the nation sent key teachers for leadership training, and the trainers returned, groomed to teach their colleagues. Her strategy took the country by storm.

Taxonomy of Questioning Strategies. Dr. Taba designed four strategies for questioning learners. She arranged them by Dr. Bloom's "Cognitive Taxonomy." 1) Concept Development: Learners recall information, group it, label groups, and subsume groups. 2) Interpretation of Data: Learners examine circumstances or issues, generate causes and prior causes, effects and subsequent

effects, infer conclusions, and form a generalization about the circumstance or issue. 3) Application of Generalizations: Learners predict outcomes of a new circumstance or issue, anticipate conditions necessary for their predictions, and determine the reliability of a generalization. The last strategy applies all of these thinking strategies to affective situations through 4) Interpretation of Feelings, Values, and Attitudes. Learners who learn with these strategies apply thinking skills and share thoughts. **The first strategy will help you with this process. You will be using the "recall" part of 1) Concept Development to draw information from learners so they can take notes from their knowledge.**

Open Focusing Question. Its name says it all. An "open" question asks for unlimited responses for everyone to share. "What comes to mind when you think of..." is a generic open question that fits all subjects. A "closed" question asks for limited responses. (e.g.: "Where is Minnesota?") An "open" question maintains open channels; a "closed" question asks that responses be addressed to the teacher. (e.g. "Tell me...") An open "focusing" question fixes on a concept to develop knowledge. It is not a "brainstorm" question of random responses for creative brainstorming. An open focusing question helps learners to recall information that they take as notes for unresearched, memory-compatible documents. You could write notes on transparency note cards, or learners could write notes on cards, or both. Eventually, teach them how to ask themselves these questions to attain self-reliance in drawing their own thoughts from memory.

Dr. Hilda Taba died of tetanus in the late 1960's. Her visions and her talents were far beyond her time. Today many educators still seek the skills to teach thinking, to ask questions that cause thinking, and to merge thinking with feelings, values, and attitudes. Perhaps educators will soon reactivate the legacy that Dr. Taba shared with us long ago.

• Open Focusing Questions for Recall •

• Teacher Responsibilities •

1. Write questions in advance and try them on a friend.
2. Establish a class rule, "Speakers give evidence for their thoughts." (i.e.: "What prompts you to make your statement.")
3. Establish a gesture that everyone will recognize as a reminder to "finish statements with evidence." (e.g.: a twist of the fingers, a summoning gesture.)
4. Set a safe discussion climate with a neutral feeling tone.
5. If students are not responding, stop the discussion. Either teach the concept that you are discussing or meet with a colleague to determine how to clarify the focus of the questions. If you teach the concept, wait a few hours before asking recall questions.

• Teacher Behaviors •

1. Ask the open question and **wait at least thirty seconds**. Leave time for thinking. When learners know information about the subject, they need time to "load" the information before giving a response. [The average waiting time currently in practice is less than a second before the questioner fills the silence with an answer or another question.]
2. As students respond, **refrain from verbal responses**. Smile pleasantly and nod slowly to maintain a safe feeling tone. In group discussions your verbal responses are distractions from the thinking, (e.g.: "uh-huh," "yes," "okay.") Repeated encouraging sounds become meaningless noise, (e.g.: "good," "uh-huh," "good.") Also, when you encourage everyone in one tone and single a special tone for only one respondent, other respondents are discredited, (e.g.: "good," "yes," "uh-huh," "good," "wonderful!")

• Thinking Skills •

Open Focusing Questions

•To Develop Knowledge and Concepts

- *.recall .group .label .subsume

•To Interpret Facts

- .causes .conclusions
- .effects .generalizations

•To Apply Generalizations

- .predictions .conclusions
- .assumptions .generalizations

•To Interpret Feelings, Values, and Attitudes

- .causes .predictions .conclusions
- .effects .assumptions .generalizations

***NOTE: Chapters 1, 2, and 3 only focus on the "recall" use of open focusing questions.** The purpose for this is to give you and learners a tool for drawing information from memories for discussions or for knowledge-based notes.

• Potential Uses • Open Question for "Recall"

[Group Discussions]

- .shared topics for subjects
- .shared knowledge
- .shared knowledge for non-researched writing
- .shared experiences
- .shared information from a research hunt
- .shared information from text book
- .shared observations
- .shared information from a viewing
- .shared responses to a lyceum
- .shared descriptors of a book's character
- .shared feelings

[Private Listings]

- .listed topics for a subject
- .listed knowledge for non-researched writing
- .listed thoughts about a topic
- .listed observations of an experiment
- .listed thoughts for an essay test
- .listed thoughts from a text
- .listed feelings
- .listed needs
- .listed things to put into priority order
- .listed things to be done
- .listed things to organize

• Implement Open Focusing Questions •

- Phrase questions with **open words** that do not limit the number of possible responses. **What do you know about Kansas?** is an open question. **Where is Kansas?** is a closed question.
- Choose **one open-question pattern** and stay with it throughout the entire discussion. Changing question pattern causes verbal distraction. The form on the right provides a question which works with all subjects of knowledge and information.
- Word the questions to imply that **everyone** in the room should listen. **Share (or tell us) what you know about the westward movement** is an open request for everyone to hear. **Tell me what you know about the westward movement** is a request which closes the channel to everyone but you, the

teacher.

- Set a class rule that learners must state the **evidence that prompts their responses**. They should state what made them make their statement. (e.g.: experience, quotes.)
- Listen and check that **responses answer the question**. If a learner gives a vague or a broad answer, ask for clarity: **Explain what you mean by ____**. If you are asking for information, and a learner states a category

instead of an informative fact, ask for specifics: **Give some specific examples of ____**.

- Listen for responses and check them with your plan as you progress.
- Use refocusing questions to reset the thinking, to keep everyone on track, and to remedy wandering talkers.
- Make **transitions that shift to extensions**. Use body movements, verbal statements, or a learner's response that leads to the next focus.

• Open Focusing Questions - Recall • Helping Learners to Develop Knowledge and Concepts

Help students to draw thoughts from their memories. Help them to draw information in class discussions, prior to essay exams, and prior to writing unresearched documents.

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Teacher You

Grade Learners

Subject [Informative]	<i>things that are destroying our environment</i>	Example: Alaska
Anticipatory Set	<ul style="list-style-type: none"> [when]: "<i>Last week...</i>" [used what sources]: "<i>we shared speakers, articles, and a video</i>" [about what subject]: "<i>about things that are destroying our environment</i>" 	e.g.: •Last week •in the media center we found information •about Alaska.
Objective	<ul style="list-style-type: none"> "Today let's share what you remember about... [subject] <i>things that are destroying our environment</i>?" "Thinking back on all you remember, ..." 	e.g.: •Today let's share what you remember about Alaska. e.g.: •Thinking back on all you remember...
Open Focusing Question	•"What come(s) to mind when you think of... [subject] <i>things that are destroying our environment</i> ?"	e.g.: •What comes to mind when you think of Alaska?
Open Refocusing Question	<ul style="list-style-type: none"> •"What else... ..come(s) to mind when you think of..." •"What other things... <i>things that are destroying our environment</i>?" •"What more... [subject]" 	e.g.: •What else comes to mind when you think of Alaska?
Open Extension Question # 1	"Good! Now think about this question." [transition] •"What come(s) to mind when you think of... [subject and extension] <i>acid rain destroying our environment</i> ?"	e.g.: •What comes to mind when you think of weather in Alaska?
Open Refocusing Extension Question # 1	<ul style="list-style-type: none"> •"What else... ..come(s) to mind when you think of..." •"What other things... <i>acid rain destroying our environment</i>?" •"What more... [subject and extension]" 	e.g.: •What else comes to mind when you think of weather in Alaska?
Open Extension Question # 2	"You're doing fine! Try this question." [transition] •"What come(s) to mind when you think of... [subject and extension] <i>disposal methods destroying our environment</i> ?"	e.g.: •What comes to mind when you think of houses in Alaska?
Open Refocusing Extension Question # 2	<ul style="list-style-type: none"> •"What else... ..come(s) to mind when you think of..." •"What other things... <i>disposal methods destroying our environment</i>?" •"What more... [subject and extension]" 	e.g.: •What else comes to mind when you think of houses in Alaska?
Extension/Refocusing Question # 3	"What comes to mind when you think of... <i>deforestation destroying our environment</i> ?"	First, list extending subtopics. Then, number them in priority order. # 4 <i>food marketing</i> [e.g.: transportation (3)]
Extension/Refocusing Question # 4	"What comes to mind when you think of... <i>food marketing destroying our environment</i> ?"	# 1 <i>acid rain</i> [e.g.: resources (4)] # 3 <i>deforestation</i> [e.g.: weather (1)] # 2 <i>disposals</i> [e.g.: houses (2)]

If needed, continue Extensions 5 and 6 on the back side.

• Open Focusing Questions - Recall •

Helping Learners to Develop Knowledge and Concepts

Teacher _____ Grade _____

Help students to draw thoughts from their memories. Help them to draw information in class discussions, prior to essay exams, and prior to writing unresearched documents.

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Subject [Informative]		Example: Alaska
Anticipatory Set •Time •Source •Content	<ul style="list-style-type: none"> • [when]: " _____ " • [used what sources]: " _____ " • [about what subject]: " _____ " 	e.g.: •Last week •in the media center we found information •about Alaska.
Objective •Mental Focus •Input	<ul style="list-style-type: none"> • "Today let's share what you remember about... [subject] _____ ?" • "Thinking back on all you remember, ..." 	e.g.: •Today let's share what you remember about Alaska. e.g.: •Thinking back on all you remember...
Open Focusing Question	<ul style="list-style-type: none"> • "What come(s) to mind when you think of... [subject] _____ ?" 	e.g.: •What comes to mind when you think of Alaska?
Open Refocusing Question	<ul style="list-style-type: none"> • "What else... _____ ...come(s) to mind when you think of..." • "What other things... _____ ?" • "What more... [subject] _____ ?" 	e.g.: •What else comes to mind when you think of Alaska?
Open Extension Question # 1	"Good! Now think about this question." [transition] <ul style="list-style-type: none"> • "What come(s) to mind when you think of... [subject and extension] _____ ?" 	e.g.: •What comes to mind when you think of weather in Alaska?
Open Refocusing Extension Question #1	<ul style="list-style-type: none"> • "What else... _____ ...come(s) to mind when you think of..." • "What other things... _____ ?" • "What more... [subject and extension] _____ ?" 	e.g.: •What else comes to mind when you think of weather in Alaska?
Open Extension Question # 2	"You're doing fine! Try this question." [transition] <ul style="list-style-type: none"> • "What come(s) to mind when you think of... [subject and extension] _____ ?" 	e.g.: •What comes to mind when you think of houses in Alaska?
Open Refocusing Extension Question #2	<ul style="list-style-type: none"> • "What else... _____ ...come(s) to mind when you think of..." • "What other things... _____ ?" • "What more... [subject and extension] _____ ?" 	e.g.: •What else comes to mind when you think of houses in Alaska?
Extension/Refocusing Question # 3	"What comes to mind when you think of... _____ ?"	First, list extending subtopics. Then, number them in priority order. # _____ [e.g.: transportation (3)] # _____ [e.g.: resources (4)] # _____ [e.g.: weather (1)] # _____ [e.g.: houses (2)]
Extension/Refocusing Question # 4	"What comes to mind when you think of... _____ ?"	

If needed, continue Extensions 5 and 6 on the back side.

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• **Open Focusing Questions** •
• **Unit Recall by Groups** •

Teacher _____

Helping Learners to Develop Long-Term Memory

Grade _____

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Use this abbreviated form with student groups:

- To write projected transparency note cards of class responses as, at the end of a day, students recall the day's studied information.
- To think in groups about connections with the "For what reason" question.
- To give students chances to lead the group, using questions and transparency notes.

A subject that students have studied today	[subject] _____
Anticipatory Set • Time • Source • Content Objective • Mental Focus • Input	• [when]: "Earlier today..." _____ " • [used what sources]: " _____ e.g.: ...we read our text " • [about what subject]: " _____ e.g.: ...about electricity " • "For a few minutes share what you remember about..." [subject] _____ e.g.: ...electricity? " • "Thinking back on today's studies, ..."
Open Focusing Question Open Refocusing Question	• "What do you remember about..." [subject] _____ e.g.: ...electricity? " • "What else... ...do you remember about..." • "What other things..." • "What more..." [subject] _____ e.g.: ...electricity? "

Extending Subtopics →

List categories within the subject that students have been studying. Then number them logically. If needed, they help you form extension questions containing the above subject and a subtopic.

1 _____ e.g.: ...uses of "E"
 # 3 _____ e.g.: ..."E"'s" current
 # 2 _____ e.g.: ...causes of "E"
 # 4 _____ e.g.: ...dangers of "E"

LARGE-GROUP TEACHING STRATEGY

Use Note-Taking and Questions

Each day ask focusing questions, and on transparency note cards write information that the class recalls from today's studies. After collecting ALL notes, lead students to share thoughts about "For what reason?"

• Open Focusing Questions • Teacher

• Unit Recall by Groups •

Use this abbreviated form with student groups:

1. Subject _____	
2. Subject _____	
3. Place what sources _____	
4. Place what subject _____	
5. For a 1 minute time what you remember about _____	
6. Subject _____	
7. Thinking back to today's reading _____	
8. What do you remember about _____	
9. Subject _____	
10. What did _____ do you remember about _____	
11. What other things _____	
12. What more _____ Subject _____	

Chapter 0 - Page 38

Page 0•38 provides one **subject plan**. Make a copy and identify a subject about which students will recall information from your content studies. Write each subject and its topics (extensions) in questions as shown in the example.

Note: The fine-print example along the right side (1) models the subject, electricity; (2) shows the focusing question as it will be asked; and (3) words questions with electricity (the subject) and its topics (the extensions).

1. SUBJECT _____

2. NOTE _____

3. FOR WHAT REASON? _____

4. LIKE OR UNLIKE WHAT? _____

Topic _____

1. SUBJECT _____

2. NOTE _____

3. FOR WHAT REASON? _____

4. LIKE OR UNLIKE WHAT? _____

Topic _____ Subtopic _____

Chapter 5 - Forms 3 and 5-7

Make a photocopy from which to make transparencies for printing student's oral notes. Grade 1 - 12: Cut the transparencies into note cards.

Make sufficient transparencies of your note form. [Kindergarten: 10 notes of Form 3; Grade 1: 10 notes of Form 5; Grade 2: 15 notes of Form 6; Grades 3-4: 25 notes of Form 7; Grade 5-12: 35 notes of Form 8]

Plan a subject about which you will ask students to recall input from the day's studies of a content subject. **NOTE:** 10 minutes before closing of an hour (or day) prepare to leave; for the closing 5 minutes of class direct eyes to the front. **For that final 5 minutes ask your planned questions so they can recall the hour's (or day's) earlier studies of your content subject.**

As students recall information:

- As they recall, write orated note on a note card transparency (not in a sentence).
(Clarify that the notes must be in non-sentence form. Instruct students to break away the sentence parts or to tell where dashes and lines can split sentences apart.)
- Repeat the same wording of each question with, "What **else** did you learn about _____" or, "What **else** did you learn about the _____ (extension) of _____ (subject)?"
- Gather the day's transparency cards, and store them in an envelope or folder.
- Each day collect notes about that day's studies and add them to the stored notes.
- After ALL notes have been collected, place one note at a time on the overhead glass. Teach students to read orally one projected note at a time and ask, "For what reason?"

- After all transparency notes have been questioned, wash the transparencies for another content subject at another time. (Option: If students have some prior knowledge about the subject, you could have them again read one note at a time, then ask, "Like or Unlike what?"
- **Help students share thoughts about any content with the above teaching strategy.**