



Building Academic Skills in Context: Embedding Literacy in Career and Technology Education

SREB

Hilton Garden Inn
September 29-30, 2008
Columbia, South Carolina

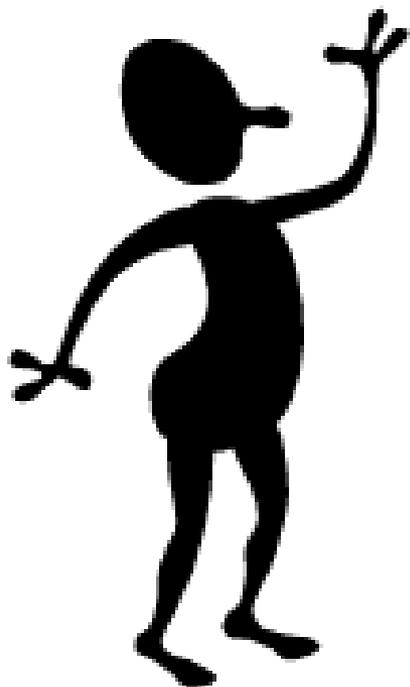
Debbie Hall
SREB/*HSTW* School Improvement Specialist

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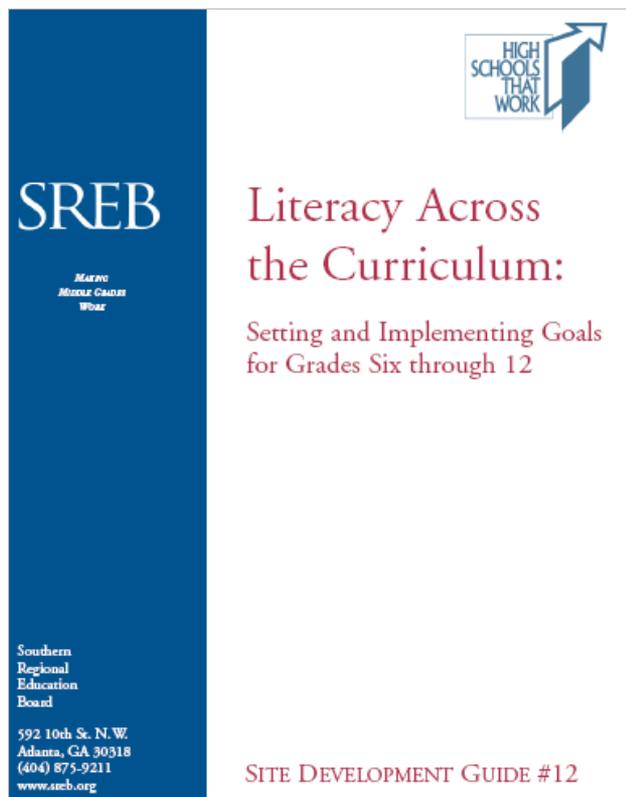


Good
Morning

Look at page 218

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Data on Display



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1. Write your name, email address and curricular area or position on the sticky side of a PostIt Note.
2. Walk around the room to find others in your field or position.
3. Claim an area of the room for your field and meet there.
4. Write the field at the top of a piece of chart paper.
5. Create a symbol for your field, and draw as many of those symbols on the paper as there are members in your group.
6. Post your chart.
7. Fold and turn in your PostIt Notes.
8. Sit with your curricular group.

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Four Corners Activity

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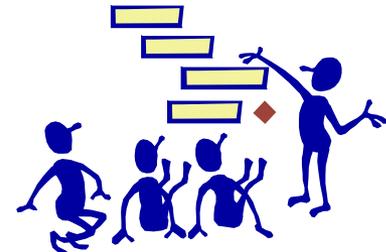
Every classroom teacher should be responsible for literacy instruction.



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Workshop Goals

- Understand the importance of procedural reading
- Model instructional strategies teachers can use to engage students in reading, writing and the language of their CTE field
- Develop a literacy plan
- Develop lesson plans around reading assignments
- Create interdisciplinary projects





What do the experts say?

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One aspect of technical literacy—the ability to read, understand and communicate in the language of a technical field—is increasingly important to the workplace.

Unfortunately, most career-technical programs don't emphasize technical reading and writing skills.

Literacy Across the Curriculum, Southern Regional Education Board

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What do the experts say?

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“Comprehension of reading material and the ability to use that material to create new thoughts and ideas is the major key to a person’s success in the global job market.”

Procedural Literacy: Building Blocks of Comprehension,
Columbia-Montour Area Vocational-Technical School, 2007

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Priorities Have Shifted

“The pedagogy of the old vocational education was based on the assumption that “how to do” was the content of courses. . . .The new direction calls for a new form of Career and Technical Education that . . .also prepares students for a constant **process** of skill development to maintain and extend marketable skills, so that students are able to advance in their chosen careers and adapt to rapidly changing economic conditions.”

Doug Rhodes, 2003

Columbia-Montour Vocational-Technical School

Bloomburg, PA

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- Schools must develop students who can follow and adapt to **procedural behavior**.
- Success in the workplace is often dependent on following a course of action and accepting the importance of **systems thinking**.
- All work requires that employees follow stated **methodologies**.
- If students are required to use a set **procedure** for all **literacy** activity, they will learn that **procedure** is a requirement for work as well as learning.

Procedural Components

Columbia-Montour

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- Higher-order questions that require students to delve deeply into reading
- Systems that relate directly to content areas
- Strategies that help students comprehend curriculum content
- Emphasis on process for engagement in reading, writing, listening

The old way of doing business

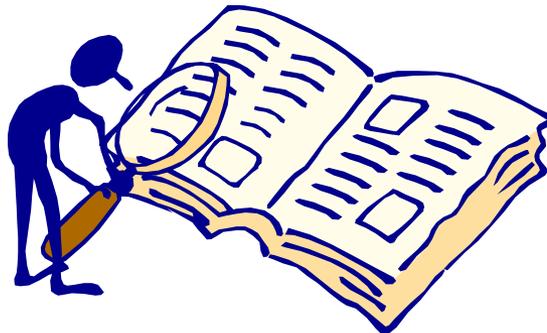
Teacher delivers information→Students absorb it

The new pedagogy

Procedure→Engagement→Comprehension

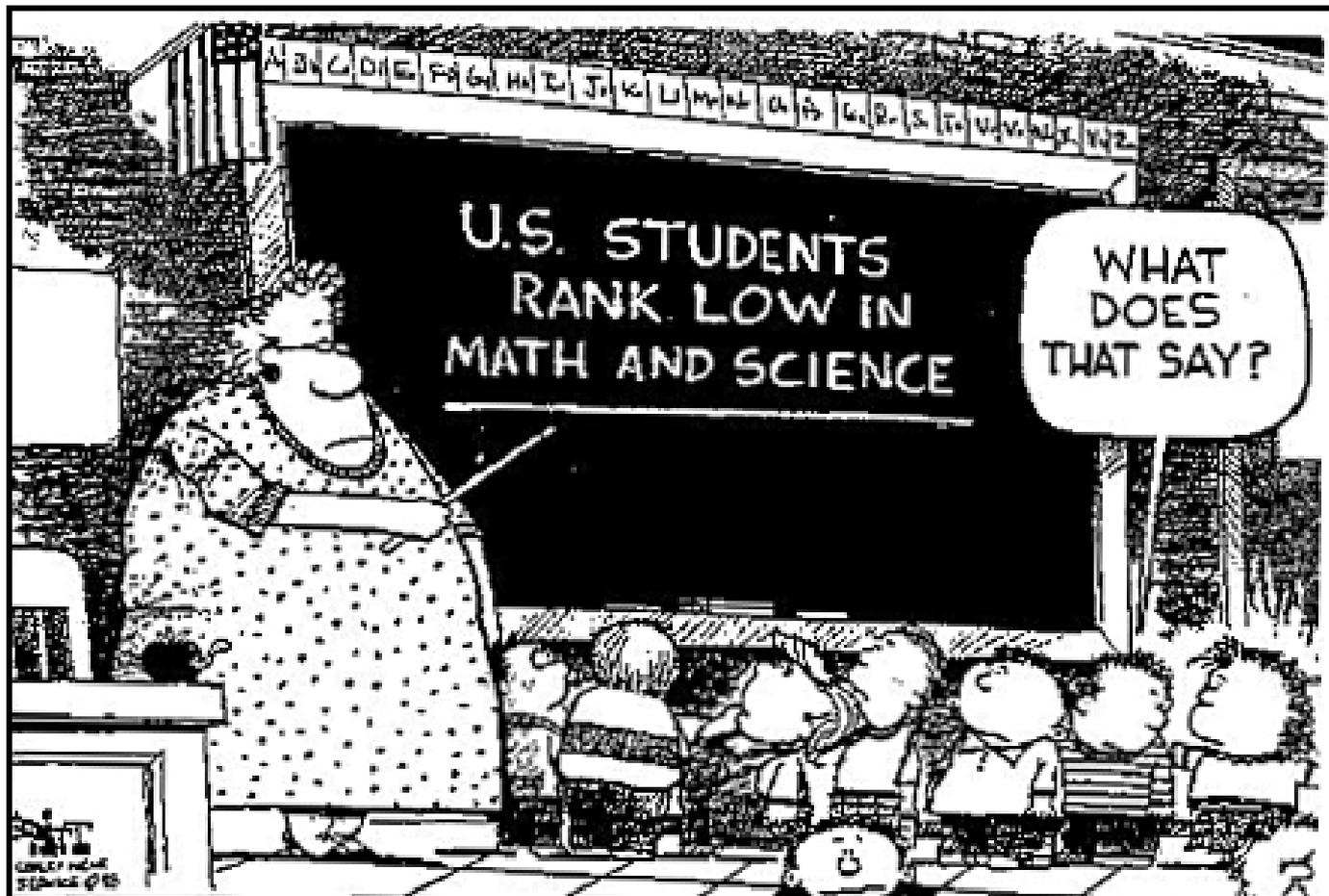
What is literacy?

- Literacy is the *foundation* for high achievement in all academic and CTE pursuits.
- Those who teach *any* subject must understand what literacy is.
- Literacy encompasses **reading, writing, listening, speaking and observing.**



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Technical Literacy is being able to

- Read, analyze, interpret, communicate, and use writing in a CTE field,
- Use mathematics to solve problems in the field,
- Apply the **processes** and skills of science, including methods of inquiry, logic, and accuracy, and a knowledge of models, **systems**, and **patterns** of change, and
- Understand and apply the content and use the terms, concepts, and **procedures** of the field to find solutions to problems and to perform necessary tasks.

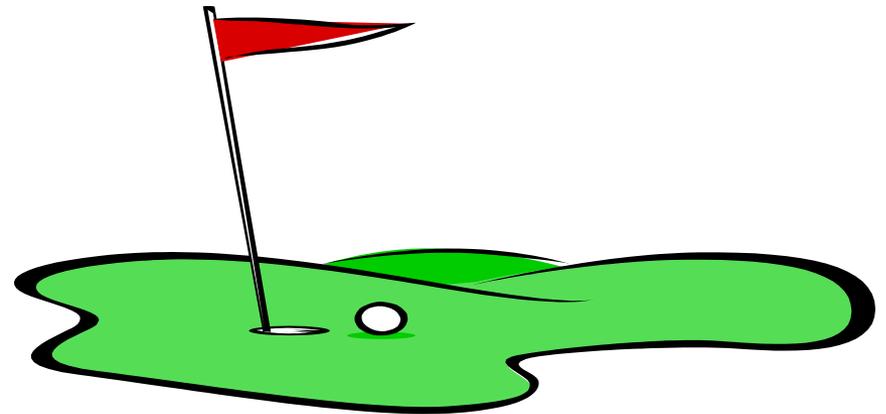
What is a literacy procedure?

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Preparation

Assistance

Reflection





Reading Comprehension Pop Quiz

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There I was, on a hard aid lead, and the RURP crack disappeared. I saw a micro-seam, but even a Birdbeak was too large. What did I use? I put in a BURP, which is a RURP cut down with a hacksaw to make a mini-Birdbeak.

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Reading Comprehension Pop Quiz

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There I was, on a hard aid lead, and the RURP crack disappeared. I saw a micro-seam, but even a Birdbeak was too large. What did I use? I put in a BURP, which is a RURP cut down with a hacksaw to make a mini-Birdbeak.

1. Where was the writer?
2. What disappeared?
3. What did he see?
4. What was too large?
5. What is a BURP?



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It is possible to make a perfect score
on a quiz and score a perfect zero in
comprehension.

Debbie Hall

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Preparation

- Determine background
- Build background
- Activate prior knowledge
- Internalize motivation



Assistance

- Read with a purpose
- Develop comprehension
- Make connections
- Generate questions
- Determine important concepts

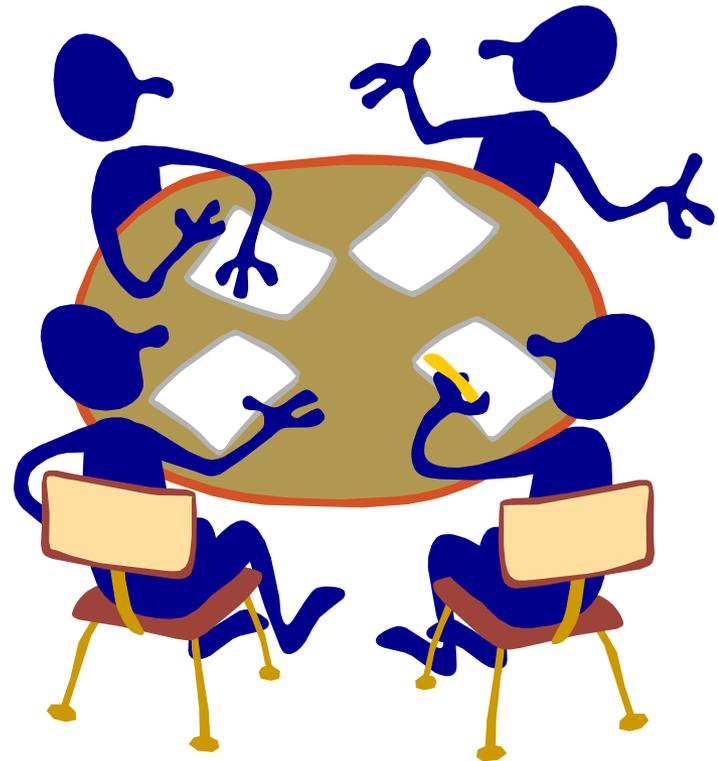


Reflection

- Determine comprehension
- Integrate new learning with previous knowledge
- Extend the reading experience
- Increase retention

Literacy Skills

- Reading
- Writing
- Speaking
- Listening
- Observing



How important is reading?

Reading is the single most important social factor in American today.

- The more you read, the more you know.
- The more you know, the smarter you grow.
- The smarter you are, the longer you stay in school.
- The longer you stay in school, the more diplomas you earn and the longer you are employed—thus the more money you earn in a lifetime.
- The more diplomas you earn, the higher your children's grades will be in school.
- The more diplomas you earn, the longer you live.

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The opposite is also true.

- The less you read, the less you know.
- The less you know, the sooner you drop out of school.
- The sooner you drop out, the sooner and longer you are poor.
- The sooner you drop out, the greater your chances of going to jail.

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How important is writing?

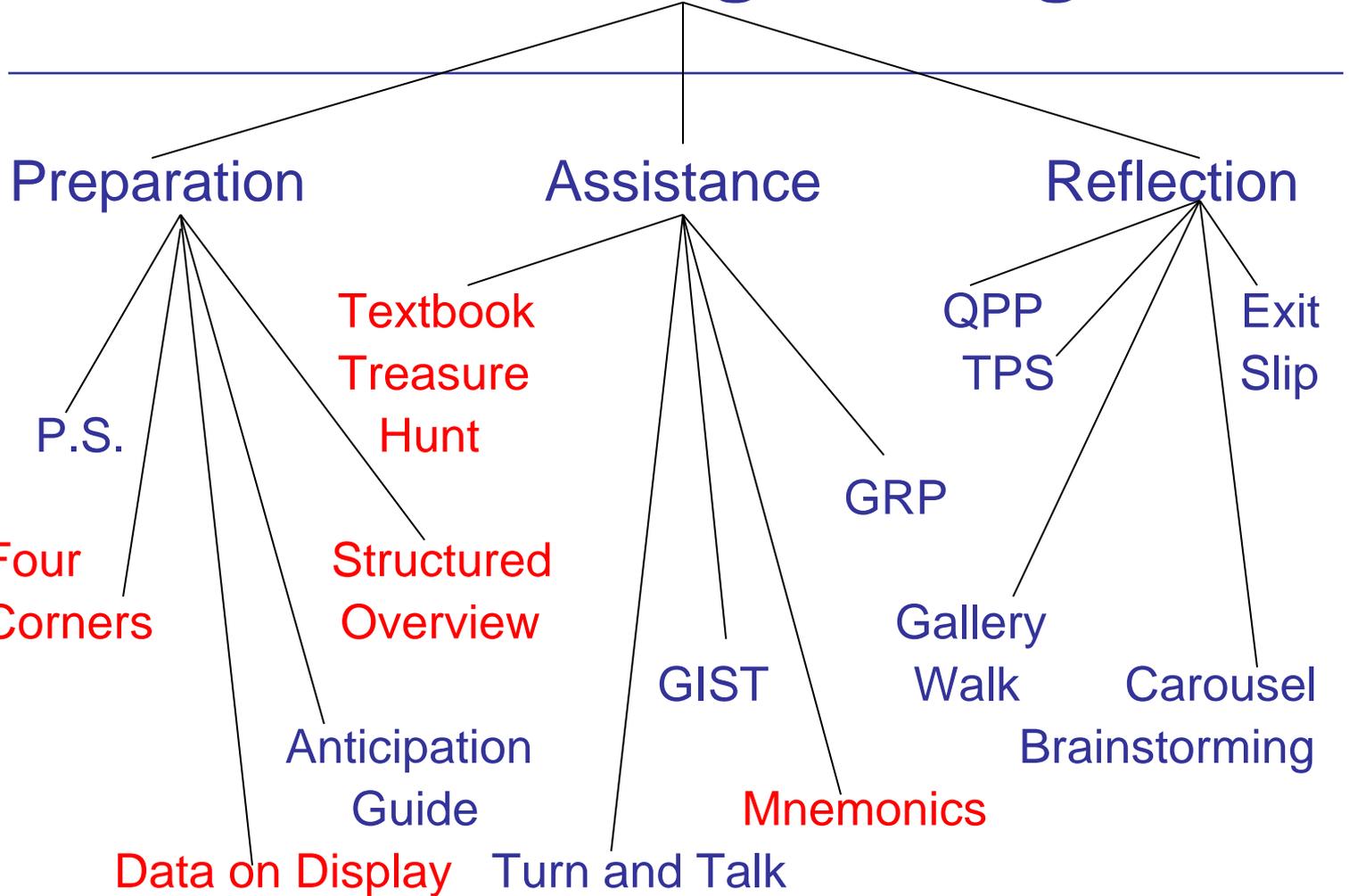
Writing Well Saves Money for Taxpayers

- A significant number of employees do not meet states' expectations.
- Writing is considered an even more important job requirement for the states' nearly 2.7 million employees than it is for the private-sector employees.
- State agencies are more likely to consider writing skills in hiring and promotion and to require writing samples from applicants.

The nation's private companies now spend an estimated \$3.1 billion per year—and state governments spend an additional \$200 million--teaching their employees to write.

National Commission on Writing (2004, 2005)
National Governors Association

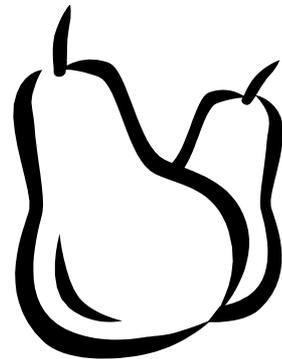
CTE Learning Strategies



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Think-Pair-Share

- Look at “My Question” on page 7.
- Answer the question in the “Think” area.
- Exchange ideas with a partner.
- Write your common ideas in the “Pair” section.
- Decide on a major idea to share with the group.



Now it's your turn

- With your table group, create a Treasure Hunt for a textbook or a trade publication.
- Use the Procedural Literacy Format (PLF) plans on pages 9 and 10 as a guide.
- Put the name of the publication, your Essential Questions and at least four “treasures” on chart paper.
- Post your chart.

Enjoy your lunch!

Come back at 1:00



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Anticipation Guide

- Before reading the article, check the items in the “Before” column that you think are true.
- In groups of three or four, share your predictions and come to consensus. Use critical thinking skills to argue your position.
- Share with the whole group.
- Silently read the article and check the items you think are true in the “After” column.
- Go back to your small group and compare your answers. Come to consensus and be prepared to support your answers in class discussion.

Now it's your turn

- Individually, create an Anticipation Guide to introduce a lesson you teach; OR as a group create one for Chapter Nine of *Literacy Across the Curriculum*.
- Complete the Procedural Literacy Format (PLF) plan on page 13.
- Follow directions for the Wows and Wonders activity on page 15.



What about technical vocabulary?

Research suggests that knowledge of the specialized word families common in a particular area . . . is probably best left to the subject teachers.

A Report on the STETS Workshop by Paul Nation, 2001



Possible Sentences

- Go to page 16 in your planner.
- In the left column, write four possible sentences—one for each word.
- Wait for further directions.



Reading Critically with a Guided Reading Procedure

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Scan

Read

Remember

Discuss

Evaluate

Categorize

Write

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Cornell Notes

Two Column Notes

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Step 1:	
○ Draw a grid with 3 sections	
Step 3: Identify key concepts	Step 2: During lesson, take notes here; use abbreviations
○ or questions	
Step 4:	
○ Summarize lesson here	

JIGSAW

Ace, make notes for Chapter 1.

Two, make notes for Chapter 2.

Three, make notes for Chapter 3.

Four, make notes for Chapter 4.

Five, make notes for Chapter 5.

Seven, make notes for Chapter 7.

Eight, make notes for Chapter 8.



Homework

Revise/complete your Textbook Treasure Hunt to make it ready to use when you return to school.

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Exit Slip/Ticket Out the Door

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- The two most important things I learned today are. . .
- My favorite part of this sessions was. . .
- I still do not understand. . .



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Admit Slip

Use a piece of notepaper as an Admit Slip to describe your experience with last night's homework. Include your suggestions for improving the assignment.

The two most important things I learned today are. . .

- Literacy is total school/cross-curricular
- The amount of reading, writing, and speaking in these activities
- How to have reading/writing in my class
- How to involve students in their learning
- Creative teaching techniques
- Need to prepare readers to read
- Need to teach students to take notes
- Ideas to encourage student activity
- Don't use round robin reading
- Prisons based on graduation rate
- Data on Display

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My favorite part of this sessions was. . .

- Wall charts
- Vocabulary--Sentences
- Cornell Notes
- Team activities--interaction
- Anticipation Guide
- Treasure Hunt--READERS' DIGEST
- Data on Display
- Moving around
- Working in curricular groups
- Gallery Walk

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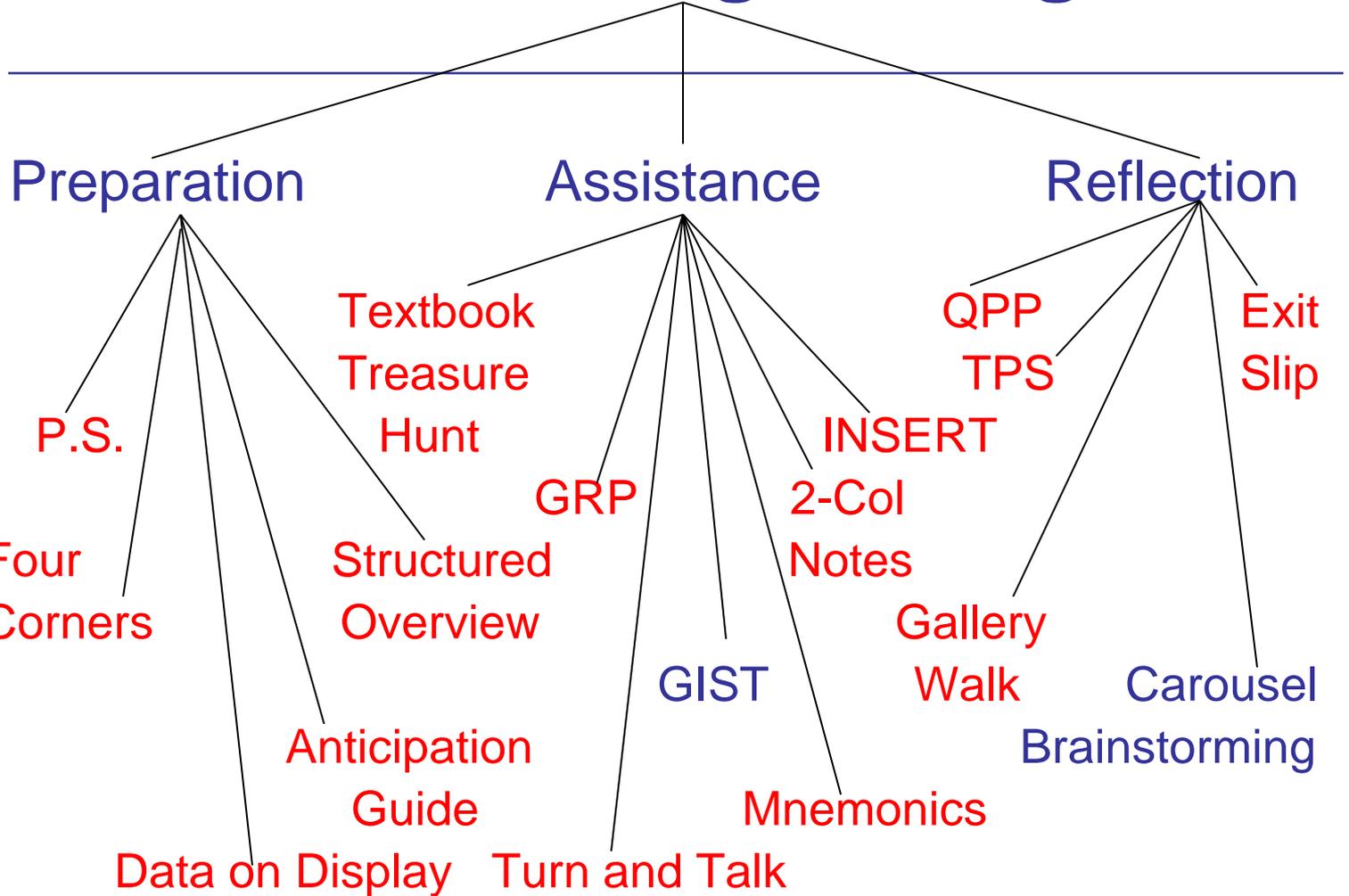
I still do not understand. . .

- The mechanics of bringing it all together
- QPP
- Titles of activities: Treasure Hunt vs. Scavenger Hunt--how beneficial?
- Reflection
- How to take fewer notes
- Why we haven't done this sooner
- Wows and Wonders
- Finding time
- INSERT

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CTE Learning Strategies



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Cold and Flu Remedies

Cornell Notes with Cloze Procedure

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Cough/Cold	Liquids--cool drinks, no <u>citrus</u> or <u>Decaf</u> <u>Cough drops</u> --soothing but mostly <u>sugar</u> Call doc when pain is <u>severe</u> , cough is <u>non-stop</u> or breathing and swallowing are <u>difficult</u>
Nasal congestion	Keep membranes <u>moist</u> --give <u>fluids</u> or flush nose with saline <u>nose drops/sprays</u> Call doc if nose is running after <u>3-5</u> days or ear pain lasts more than <u>a day or two</u>
Fever	Keep child <u>cool</u> /don't "sweat out" a fever. Give <u>tepid</u> baths/don't use <u>rubbing alcohol</u>

Why We Need an Across-the-Curriculum Emphasis on Literacy

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○	Chapter 1: LAC
○	
○	Summary:

HSTW Literacy Goals

1. Read the equivalent of 25 books per year across the curriculum.
2. Write weekly in all classes.
3. Use reading and writing strategies to enhance learning in all classes.
4. Write research papers in all classes.
5. Complete a rigorous language arts curriculum taught like college-preparatory/honors English

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Why Students Don't Read and What Schools Can Do About It

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<input type="radio"/>	Chapter 2: What to do?
<input type="radio"/>	
<input type="radio"/>	Summary:



Literacy Goal #1

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Read the equivalent of 25 books
per year across the curriculum.

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How much do American adults read?

- In 1999, typical readers read ten books.
- In 2005, typical readers read five books.
- In 2007, typical readers read four books.
- Excluding those who read no books, the usual number read in 2007 was seven.

Gallup, 2005; National Endowment for the Arts, 2004;
Associated Press, 2007

One in Four Adults Read NO Books Last Year

- 27% -- no books
- 1/3 of men--no books
- 1/4 of women--no books
- less educated, lower income, minority, rural, less religious

Associated Press-Ipsos poll, 2007

THE FUSCO BROTHERS

By J.C. Duffy



Occupational Reading Data

Weekly Percentages

Mikulecky, National Adult Literacy Survey (2001)

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Job	Memos	Reports	Manuals	Instructions	Diagrams
Mgt.	93%	83%	71%	31%	30%
Prof.	86	63	69	39	41
Tech.	82	68	71	54	49
Sales	70	50	50	28	23
Clerical	85	61	57	31	25
Service	46	28	25	37	12
Farming	37	27	28	24	17
Crafts	61	38	56	34	55
MachOp	47	27	31	25	30
TransOp	54	32	28	25	22
Laborer	41	19	28	20	22

“In 1965, a car mechanic needed to understand 5,000 pages of service manuals to fix any automobile on the road; today he must be able to decipher 465,000 pages of technical text, the equivalent of 250 big-city phone books.”

Whitman, Shapiro, Taylor, Saltzman and Ausrer 1989

Getting Students to Read More: How Do You Do It?

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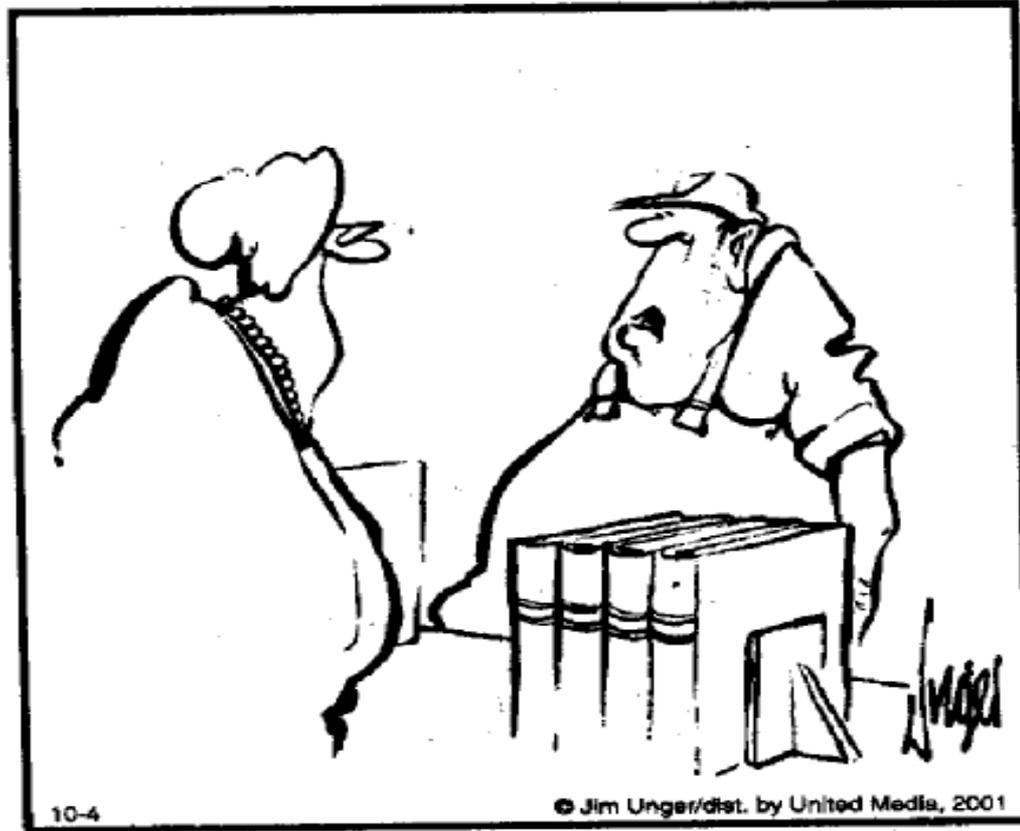
<input type="radio"/>	Chapter 4: Reading More
<input type="radio"/>	
<input type="radio"/>	Summary:

Do students have time to read?

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CLASSIC HERMAN

By Jim Unger



10-4

© Jim Unger/dist. by United Media, 2001

**"I want a book on speed-reading
and 85 novels."**

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Do The Math

- Goal of 25 books
- 250 words per minute
- 250-300 words per page (novel)
- 200 pages per novel/**100 pages per technical book**
- 175 school days

equals

*less than 30 minutes per day
to reach goal!*

Read the Equivalent of 25 Books Across the Curriculum.

Carousel Brainstorming

- Stand at the poster to the right of the one labeled with your curricular area.
- Spend three minutes at the poster. Make a list of books, plays, poems, magazines, articles, movies, short stories, etc. that apply to the CTE area.
- At the signal, move to the poster on your right and continue to list appropriate materials.

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What are others reading?

Culinary Arts

- *Who Moved My Cheese*, Johnson
- *How Full Is Your Bucket*, Rath
- *Eat Cake*, Jeanne Ray
- *A Taste for Writing*, Cadbury
- *Leadership Lessons From a Chef*, Charles Carroll
- Newspaper in Education
- Diane Mott Davidson mysteries

Networking Security

- *Tuesdays With Morrie, Albom*
- *As A Man Thinketh, Allen*
- *Five People You Meet in Heaven, Albom*
- *Traveler's Gift, Andrews*
- *For One Day More, Albom*
- Weekly technical manual reports

Nursing/Health Occupations

- *Another Day in the Frontal Lobe*, Firlik
- *Water With Lemon*, Foco and Moss
- *A Cup of Comfort for Nurses*, Sell
- *A Random Act*, Broaddus and Lohman
- *Final Gifts: Understanding the Special Awareness, Needs and Communications of the Dying*, Callanan and Kelley
- *Tuesdays With Morrie*, Albom
- Case studies

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Cosmetology

- *A Survival Guide for Cosmetologists,* Levine
- Magazine articles



Literacy Goal #2

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- Chapter 5: Weekly Writing

Writing
to learn

Writing to
demon-

- strate
learning

Authentic
Writing

- Summary:

Write weekly in all classes

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Three Kinds of Writing

```
graph TD; A[Three Kinds of Writing] --- B[Writing to learn]; A --- C[Writing to demonstrate learning]; A --- D[Authentic writing]
```

Writing
to learn

Writing
to demonstrate
learning

Authentic
writing



Writing to learn

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- Journals
- Learning Logs
- Exit/Admit Slips
- Inquiry Logs
- Mathematics Logs
- **Note taking**

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Writing to Demonstrate Learning

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- Paragraphs
- **Summaries (GIST)**
- Open-response Questions
- Brief Constructed Response (BCR)
- Extended Constructed Response (ECR)
- Lab Reports
- Essays
- Research Assignments

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Generating Interactions between Schemata and Text

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Authentic Writing

- ✓ Memos
- ✓ Reports
- Letters
- Proposals
- ✓ Forms
- Memoirs
- Poems
- Songs
- Short Stories
- ✓ Directions/Process Papers

How do you cook a turkey?

- First, catch it and bring it home. You need a bowl and a plate. Fry it. We will know it is done because we can eat him. Braulio
- It needs to stay in the stove for 2 or 5 minutes. We know it is ready when Mommy says so. Jessica
- Put it in the microwave for 5 minutes. When it stops going around, the turkey is ready. Let it cool off. Caleb

How do you cook a turkey?

- First you need to put some salt and pepper on the turkey. Then put some cheese on it and put it in a pot. Put the pot on the stove. Turn the stove to hot. You have to look at it to see if it's ready. It will be brown. Dalton
- First go to the store because I don't have a turkey at my house. Krisztian

How do you cook a turkey?

- First you put sugar on top of the turkey and then some salt. Put it in the oven at 30 degrees. Leave it in the oven for one hour. It will kind of look like chicken when it's done. Mackenzie
- Put it in the oven at 100 because it needs to be hot? Leave it there for about 25 minutes. When it is ready it will have bones sticking out of its legs. Zac

Following Directions

How to put on panty hose

1. Sit on the edge of a chair.
2. Gather the left leg of the panty hose from the waistband to the toe. Insert left leg and gently pull the hose up to below the knee. Repeat with the right leg.
3. Stand and gently pull the hose upward, alternating from left side to right.
4. Continue this process until the waistband of the hose sits comfortably at your waist.

Occupational Writing Data

Weekly Percentages

Mikulecky, National Adult Literacy Survey (2001)

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Job	Memos	Reports	Forms
Managerial	75%	87%	73%
Professional	33	73	43
Technical	35	64	49
Sales	51	56	53
Clerical	58	71	63
Service	23	35	26
Farming	31	25	24
Crafts	34	47	42
Machine Op.	22	32	26
Trans. Op.	40	40	48
Laborer	28	26	28

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Enjoy your lunch!

Come back at 1:00



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Literacy Goal #2

Write weekly in all classes.

Turn to pages 31 and 32 and begin to draft the first two parts of your literacy plan.



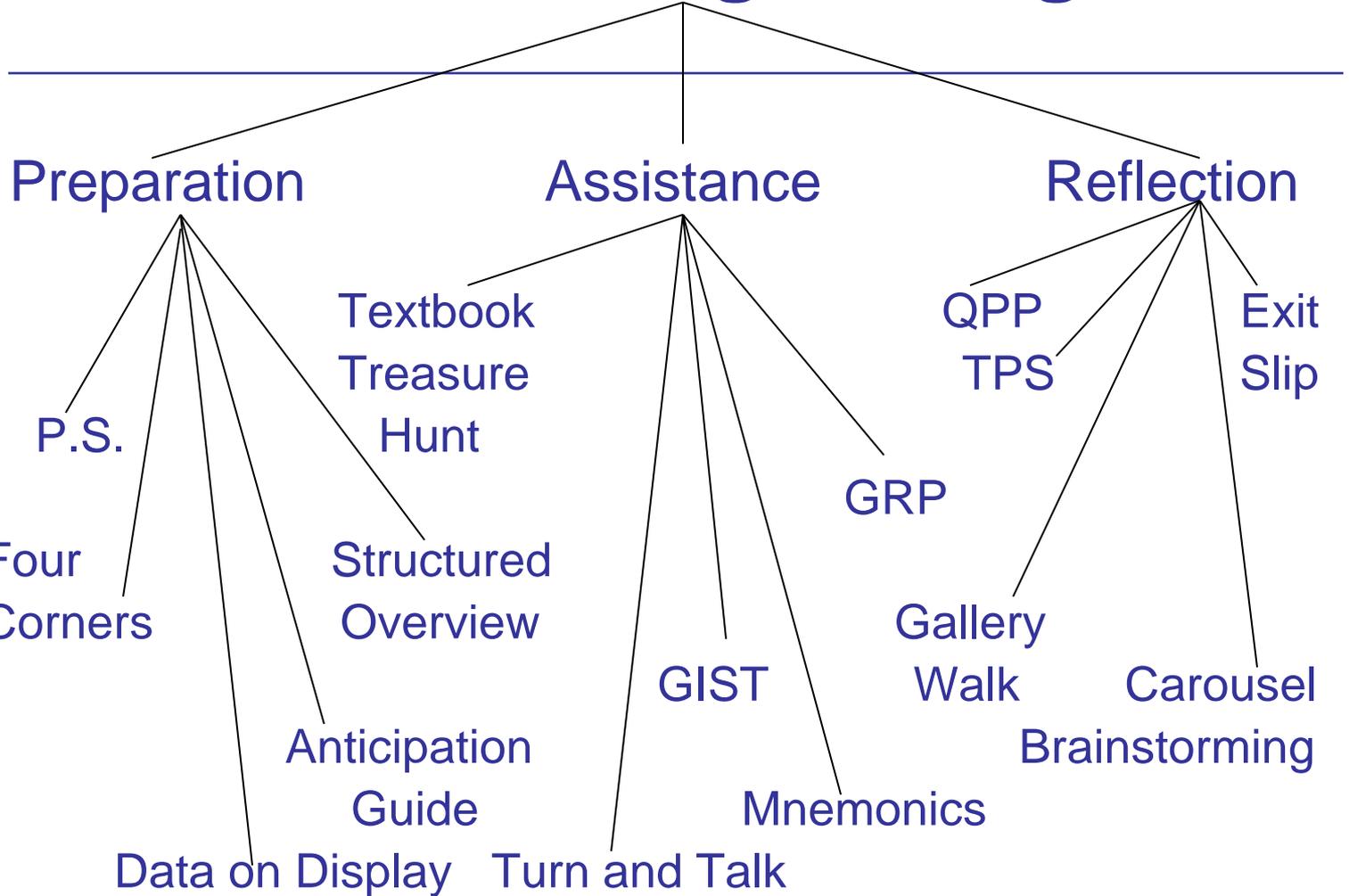
Literacy Goal #3

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Use reading and writing strategies to enhance learning in all classes.

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CTE Learning Strategies



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Bye, Bye Birdie

Reasons to Avoid Round Robin Reading

- It encourages negative attitudes about reading.
- It is boring for everyone.
- Proficient readers read ahead.
- Poor readers are forced to advertise their deficiencies.
- Children pay attention only to the passage they have to read aloud.
- It does not build fluency or accuracy.
- Children need to read entire passages instead of pieces.
- It does not require engagement with the text.

HSTW Literacy Goals

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Literacy Goal #4

○ Chapter 7: Research Writing

○

○

Summary:

Literacy Goal #5

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○ Chapter 8: Honors English

○

○ Summary:

Complete a rigorous Language Arts curriculum

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- Work toward mastery.
- Evaluate with rubrics.
- Require frequent revisions.
- Balance three types of writing.
- Read widely in and out of class.
- Use a variety of resources and assessments.
- Avoid “tracking.”
- Apply learning through writing and speaking.
- Provide for oral communication.

What about Chapter Three?: Launching a Literacy Campaign

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<input type="radio"/>	Chapter 3: Campaign
<input type="radio"/>	
<input type="radio"/>	Summary:

What have we done?

Chart the following:

- A description of how you will create your literacy team.
- The major components of each year of your three-year literacy plan.

Appoint a speaker to share your plan with the whole group at 3:10.



It's your time to shine!

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You have 20 minutes to develop what you will share with your faculty as a way of introducing your new literacy plan. Please choose from the following as your vehicle:

song

poem

rap

skit

sermon

TV ad

PSA

cheer

See me if you have other ideas.



Reflection and Debriefing

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- Reflecting
- Evaluating

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Thank You

debbie.hall@sreb.org

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