

# Struggling Readers in the Content Areas



Gerlinde Grandstaff-Beckers, Ph.D.  
**Louisiana State University  
University**

Evan T. Ortlieb, Ph.D.  
**Valdosta State**

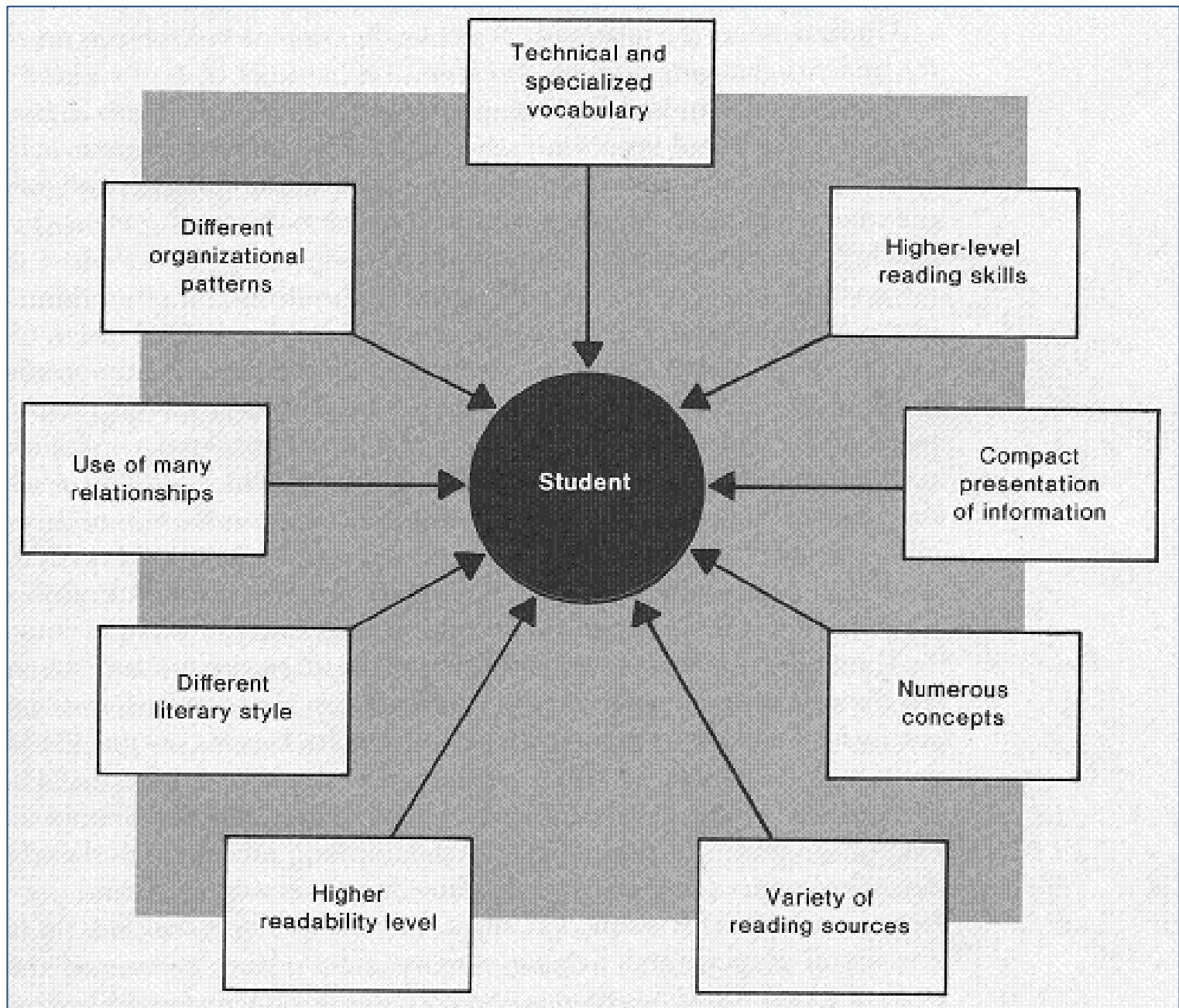
Earl H. Cheek Jr., Ph.D.  
**Louisiana State University**

# Session Objective

- **This session will explore the characteristics and nature of effective practices in content literacy. Explicit and systematic strategy instruction will be modeled in the area of vocabulary development and comprehension.**

# Reading in the Content Areas

- There are many factors that contribute to the difficulty of content reading.
  - What are some factors that you think impact student learning?



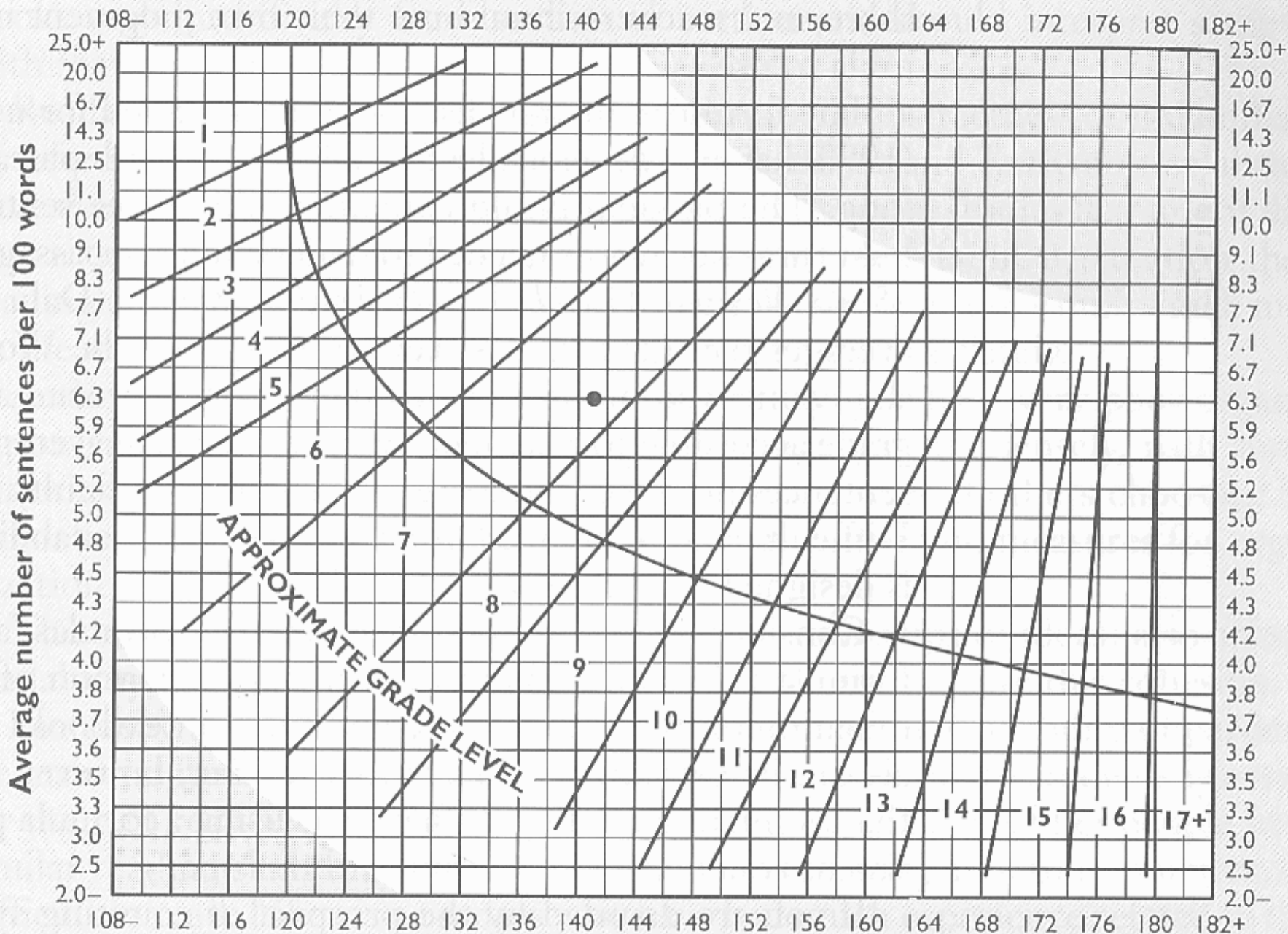
# Assessing Content Area Texts

- Knowing the demands made by a particular subject matter text, teachers are in a better position to help students comprehend material in that area
- Because texts are a key element in most content area classes and can make a significant difference in students' learning they should be carefully assessed

# Objective Measures to Estimate Readability

- Syllable Formulas:
  - Fry Readability Graph: is one of the most popular, measures sentence length and number of syllables in a word. Directions:
    - Randomly select 3 - 100 word passages
    - Plot average number of syllables
    - Plot average number of sentences
  - Flesch-Kincaid formula: found in Microsoft Word, measures sentence length and number of syllables in a word.

# Average number of syllables per 100 words



## Determining Readability Level

# Flesch-Kincaid

Higher scores indicate material that is easier to read

Lower numbers mark harder-to-read passages

90-100	Average 5 <sup>th</sup> grade
60-70	8 <sup>th</sup> – 9 <sup>th</sup> grade
0-30	College Level

Flesch-Kincaid → using Microsoft Word

### Setting up the program

- 1) Go to **Tools** menu; then click on **Options**
- 2) Within the **Options** menu, click **Spelling and Grammar**
- 3) Click **Show Readability Statistics**, and then click **OK**

### Performing a readability check

- 1) Highlight the desired text by clicking at the beginning of the text and dragging the mouse to the end of the text.
- 2) With the selected passage highlighted, click **Tools** from the taskbar at the top of the screen.
- 3) Click **Spelling and Grammar** in the **Tools** menu.
- 4) Correct any spelling changes necessary. If a box appears stating, "Do you want to check the remainder of the document?" check **No**.
- 5) Readability statistics will appear in the box once spelling changes have been made.
- 6) Look at the bottom of the box where it will display the **Flesch-Kincaid Grade Level** equivalent for the highlighted passage of text.

# Vocabulary Knowledge

- Stahl (1986) Describes three degrees of word knowledge
  - Definitional knowledge means that the student can tell what a word means
  - Contextual knowledge requires understanding the core concept the word represents and how that concept is changed in different contexts (required before comprehension is fostered)
  - Generative knowledge is required before words become part of our expressive, or speaking and writing vocabularies

# Selecting Words to be Taught

- Ask, “What do I want my students to learn?” lesson objective, benchmarks, standards, grade-level expectations
- Present only 7 or 8 words at one time
- Focus on high priority words and teach to a conceptual level
- Other, less important, less frequently appearing words might be taught to a definitional level.

# Estimating Students' Vocabulary

- Important prerequisite for building vocabulary
- **Knowledge Rating Scale** (Dale and O'Rourke, 1971)

Vocabulary Word	I Know it!	I've heard of it....	I've never seen it before.
1.			
2.			
3.			
4.			
5.			

# Vocabulary Strategies

# Vocabulary Self-Selection (VSS)

(Ruddell, 1992, Ruddell & Shearer, 2002)

- VSS involves the following steps:
  - Selecting the words
    - Chart paper or board
  - Defining the words (context)
    - External references
  - Finalizing the word lists
    - journals
  - Extending word knowledge

# Feature Analysis

(Pittelman, Heimlich, Berglund, & French, 1991)

- Feature Analysis can summarize distinctive ways in which related concepts are similar and different
- 4 Steps
  - Category selection
  - List category Terms
  - List Features
  - Complete Feature Chart

# Feature Analysis - Category Planets

Planet	Hot	Cold	Rings	Life	Moons
Mercury	+	-	-		-
Venus	+	-	-		-
Earth	-	-	-		
Mars	-	-	-		+
Jupiter	-	+	+		+
Saturn	-	+	+		+
Uranus	-	+	+		+
Neptune	-	+	+		+
Pluto	-	+	-		+

# Key Word Approach

- Students create images to help them associate a meaning with a new word
  - Fold index card in half, word on outside , picture on the inside
- How effective is the key word approach? Jones, Levin, Levin, & Beitzel, (2000), students who used the key word approach learned **almost twice as many words** as those a conceptual sentence composing approach

# Morphemic Analysis Strategy

- A morpheme is the smallest unit of language which has an associated meaning
- 60-70% of words contain morphemic units or clues
- Two types
  - Free morphemes can function as a word
    - “some” or “thing”
  - Bound morphemes are those units that occur only as attachments, prefixes, suffices, or roots
    - “tele,” “er,” “cide”

## Morphemic Analysis strategy continued...

- **3 Steps**

- Using selected content vocabulary (can be from VSS)
- Small groups of students are directed to select a word and identify and define the morpheme of their word (glossaries or dictionaries)
- Students then generate “content” words and general words with the same morpheme
- As a whole class, a display chart is constructed with the students’ findings.
- New morpheme and definitions can be added to word walls, journal, or personal dictionaries

# Morphemic Analysis Example

<b>Morpheme &amp; Definition</b>	<b>Content Usage (Math)</b>	<b>General Usage</b>
Tri means 3	Trinomial Triangle	Tricycle Trifocals

# Comprehension Strategies

# Three-Level Study Guide

- Teacher-designed questions → solicit student responses at each level of comprehension:
  - 1) literal level
  - 2) interpretive level
  - 3) applied level

# Three-Level Study Guide

- These three levels may be separated for instructional purposes but are inseparable in terms of how they develop insight and understanding of the conceptual complexities of subject area resources.

# Literal Level

- Focuses on any or all of the following:
  - 1) reading the passages
  - 2) hearing the words
  - 3) viewing the images
- it involves identifying the important and essential information

# Interpretative Level

- Focus shifts to reading between the lines, looking at what is implied by the material under study
- Requires students to combine pieces of information in order to make inferences about the author's intent and message

# Interpretative Level

- Guides students to recognize these perceived relationships
- Promotes understanding
- Decreases the risk of being overwhelmed by the complexities of the text being viewed, heard, or read

# Applied Level

- Guides students towards:
  - 1) synthesizing information
  - 2) reading between the lines
  - 3) developing a deeper understanding of the concepts, principles, and implications presented in the text

# Cloze Procedure

- 250-300 word passage
- First and Last sentences remain intact
- Every 5<sup>th</sup> word is deleted and left blank
- (optional) supply word bank

# Cloze Procedure

- Encourages learners to use context clues to predict words
- Allows them to try different words without teacher assistance

# Cloze Procedure

## Steps:

- 1) instruct the learners to read and supply the words to fill in the blanks
- 2) have the learners write down the words they use
- 3) In partners, discuss the word choices they have made
- 4) encourage the learners to read the text again silently, using the appropriate words

# Example

What factors affect local climate?

Mountains affect the local climate in a region. They change the movement \_\_\_\_\_ air masses. Mountains also \_\_\_\_\_ patterns of precipitation. The \_\_\_\_\_ shows air being forced \_\_\_\_\_ over a mountain. As \_\_\_\_\_ rising air cools, water \_\_\_\_\_ in the air condenses \_\_\_\_\_ forms clouds. Rain or \_\_\_\_\_ falls on the side \_\_\_\_\_ the mountain where the \_\_\_\_\_ is rising. By the \_\_\_\_\_ the air reaches the \_\_\_\_\_ of the mountain, it \_\_\_\_\_ lost most of its \_\_\_\_\_. So the air that \_\_\_\_\_ down the other side \_\_\_\_\_ the mountain is dry.

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16)

# Cloze Procedure

- Teachers must consider the issue of misspelled, incorrect, and inappropriate words
- *Also → Correct vs. Appropriate words*
- If it makes sense with the rest of the story, leave it
- Only correct inappropriate words that do not make sense

# Innovative Cloze Task

- Follow these steps to make the cloze task more fun and interesting:
  - 1) Give each group of students a different page of the book
  - 2) Make into a cloze passage with space left for an illustration
  - 3) Assemble them to create a class-made version of the book
  - 4) Write the names of all the “authors” and provide other book cover information

# Innovative Cloze Task

## Benefits:

- Gives students a sense of satisfaction and ownership
- Gives them a sense of what books consist of and how they are made
- Provides teacher with:
  - Student's reading level
  - Use of context while reading
  - Knowledge of vocabulary

# Using PowerPoint

- Mountains affect the local climate in a region. They change the movement of air masses. Mountains also affect patterns of precipitation. The diagram shows air being forced over a mountain. As the rising air cools, water vapor in the air condenses to form clouds.

# PReP (Pre-reading Plan) Strategy

- PReP provides students with the opportunity to engage in a group brainstorming session about material to be read or as an introduction to a learning experience.
- By participating in this activity prior to reading, they learn to make associations and connections about a topic and to reflect and reformulate the ideas they shared.

# PReP (Pre-reading Plan) Strategy

- PReP is an effective strategy to be used with students who think they know little about the topic because this technique helps them access relevant information they do possess. Thus, their learning is maximized.
- For students who know a lot about the topic, using PReP helps them determine what is important and what is not.

# PReP Activity

- (See handouts)

# A Collaborative Approach

# Collaborative Strategic Reading

Klingner, Vaughn, Dimino, Schumm, & Bryant (2001)

[www.sopriswest.com](http://www.sopriswest.com)

- CSR infuses metacognitive instruction into explicit strategy instruction with expository text structures by designing lessons around four critical questions:
  - 1) what is the strategy?
  - 2) when is the strategy used?
  - 3) why is it important to use this strategy?
  - 4) how is the strategy performed?
- Cooperative learning groups or paired learning

CSR continued...

- 17 scripted lessons
  - Scaffolded instruction
    - Modeling phase
    - Teacher assisted phase
    - Independent phase
- 4 strategies that occur before, during, and after reading
- Learning Log

# CSR continued...

## Before Reading

### **Preview – expository text characteristics**

1. Brainstorm – what do we already know about the topic?
1. Predict – What do you predict we will learn about the topic when we read the passage?

# CSR continued...

## **During Reading**

### **Click and Clunk**

1. Were there any parts that were hard to understand? (clunks)
2. How can we fix the clunks? Use fix-up strategies (4)

### **Get the Gist**

1. What is the most important person, place, or thing in this section?
2. What is the most important idea about the person, place or thing?

CSR continued...

## After Reading

### Wrap-Up

1. Ask questions – what questions check whether we understand the most important information in the passage?  
Can we answer the questions?
2. Review – what did we learn?

# Possible Roles

- Leader
- Clunk Expert
- Gist Expert
- Timekeeper

**Today's Topic** \_\_\_\_\_

**Before Reading -  
Preview**

What I already know  
about the topic

**During Reading –  
Clunks & Gists**

**After Reading –  
Wrap Up**

Questions about the  
important ideas in the  
passage

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What I predict I will  
learn

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What I learned.

**Example of a Learning Log**

Questions????