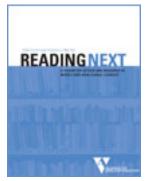
Why Secondary Students May Not Be Able to Read



2012 MTSS Symposium

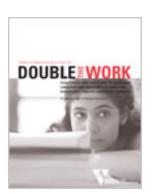
Don Deshler University of Kansas

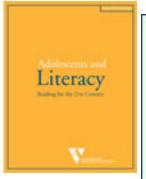
20+ Reports on Adolescent Literacy





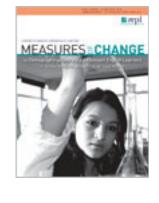








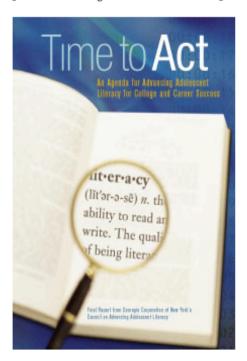






TIME TO ACT AND FIVE CORRESPONDING REPORTS

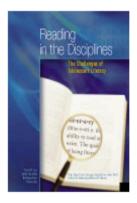
[Click each image to download a PDF.]



Reflecting years of research, Time to Act is a watershed report on adolescent literacy from Carnegie Corporation of New York's Council on Advancing Adolescent Literacy. The Council also authored five corresponding reports, which delve deeper into how to advance literacy and learning for all students.

A print copy of Time to Act (one per customer) may be ordered from Cavanaugh Press, 8960 Yellow Brick Road, Baltimore, MD 21237, (410) 391-1900 X218 or via email at Mleizear@cavanaughpress.com. The corresponding reports are available online only. For hard copies of Reading Next or Writing Next please send an email request

1.11 1



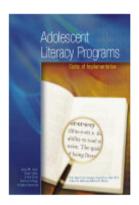
Reading in the Disciplines: The Challenges of Adolescent Literacy, by Carol D. Lee Ph.D. and Anika Spratley, Northwestern University



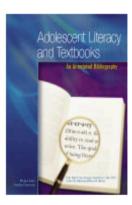
Adolescent Literacy
Development in Out of School
Time: A Practitioner's Guide,
by Elizabeth Birr Moje and
Nicole Tysvaer, University of
Michigan



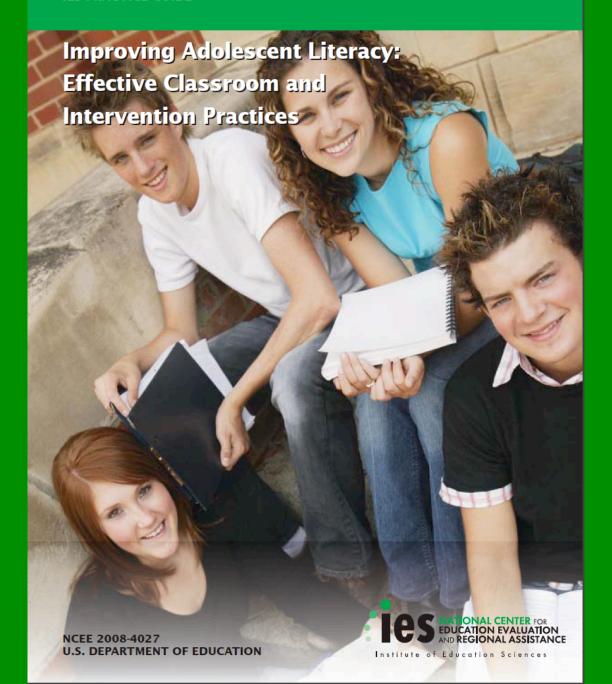
Measure for Measure: A
Critical Consumer's Guide to
Reading Comprehension
Assessments for Adolescents,
by Leila Morsey, Harvard
Graduate School of Education;
Michael Kieffer, Teachers
College, Columbia University;
Catherine Snow, Harvard
Graduate School of Education



Adolescent Literacy
Programs: Costs of
Implementation, by Henry M.
Levin, Doran Catlin, and Alex
Elson, Teachers College,
Columbia University



Adolescent Literacy and Textbooks: An Annotated Bibliography, by Michael Kamil, Stanford University



IES Recommendations

- Explicit vocabulary instruction
- Direct, explicit comprehension strategy instruction
- Discussion of text meaning & interpretation
- Increase student motivation & engagement in literacy learning
- Qualified specialists for intensive, individualized interventions

Exhibit #1

(Some numbers to consider)

A Review of Some Facts

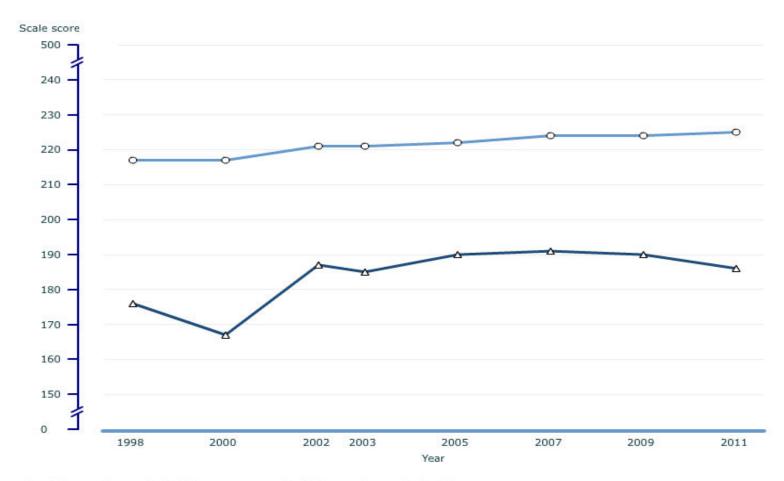
- Approximately 75% of students graduate within 4 years. (Chapman, Laird, & KewalRamani, 2010)
- About 55% of students with disabilities graduate in 4 years. (Data Accountability Center, 2008)
- High school students in the lowest 25% of their class are 20 times more likely to drop out than the highestperforming students. (Carnevale, 2001)
- More than 8 million students in grades 4—12 are struggling readers. (Perie, Grigg, & Donahue, 2005)
- Approximately 53% of high school graduates enroll in remedial courses in postsecondary education. (National Center for Education Statistics, 2001)

A Review of the Facts: (Cont.)

- 46% of students identified with disabilities completed secondary school with a regular diploma
- 75% is the rate of secondary school completion in the total population
- On the NAEP, the average score in reading for 4th graders identified with disabilities was **lower** in 2011 than 2009
- On the NAEP, the average scores in reading for 8th graders identified with disabilities were no higher in 2011 than 2009 but were higher for students without disabilities.

NAEP Grade 4 National Results

Average scale scores for reading, grade 4 by disability status of student, including those with 504 plan for year: 1998, 2000, 2002, 2003, 2005, 2007, 2009, and 2011 National



△ Identified as student with disability O Not identified as student with disability

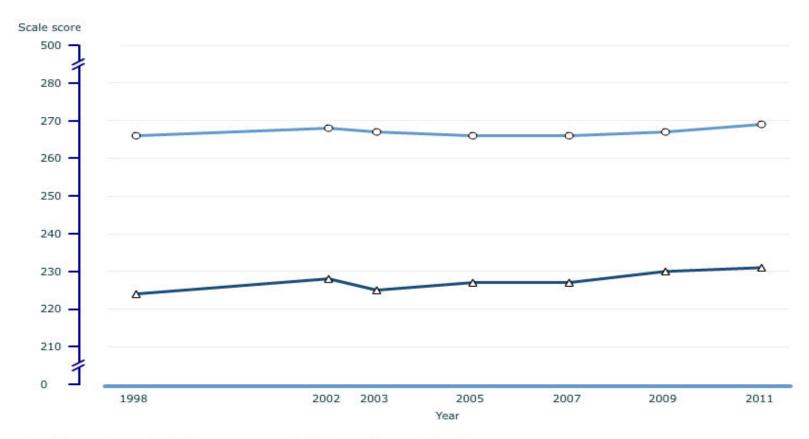
NOTE: The NAEP Reading scale ranges from 0 to 500. Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2000, 2002, 2003, 2005, 2007, 2009 and 2011 Reading Assessments.

^{*} Significantly different (p < .05) from 2011.

NAEP Grade 8 National Results

Average scale scores for reading, grade 8 by disability status of student, including those with 504 plan for year: 1998, 2002, 2003, 2005, 2007, 2009, and 2011 National



△ Identified as student with disability O Not identified as student with disability

NOTE: The NAEP Reading scale ranges from 0 to 500. Some apparent differences between estimates may not be statistically significant.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1998, 2002, 2003, 2005, 2007, 2009 and 2011 Reading Assessments.

^{*} Significantly different (p < .05) from 2011.

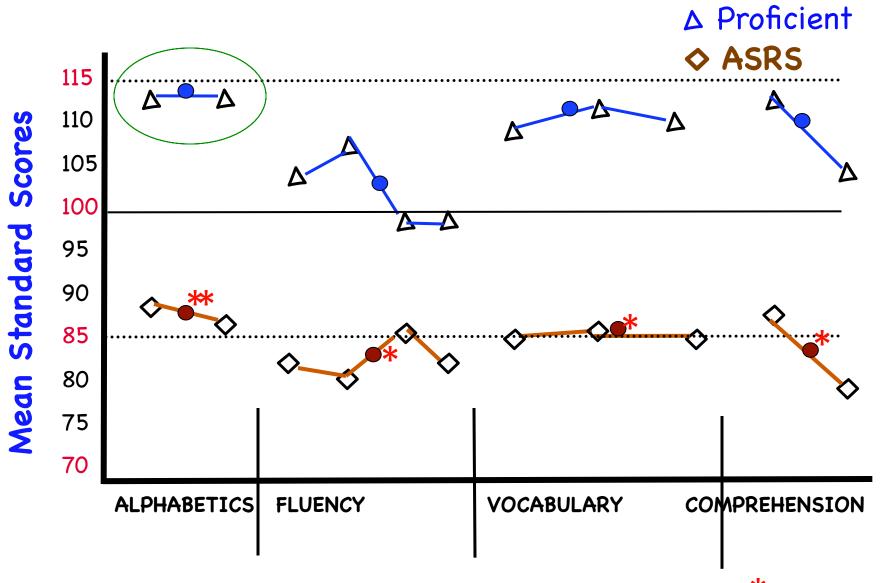
30 Million Word Gap

- Hart & Risley 2.5 years in Kansas City homes
 - Professional
 - Working class
 - Welfare
- Words heard per hour
 - Welfare = 616
 - Professional = 2153
- Vocabulary @ 3 = Reading Comp @ 9

240 minutes/day

"For elementary students, it takes about 240 minutes/day to catch up a student who is two years behind."

Reading Component Profile



"Clusters" of Poor Comprehenders

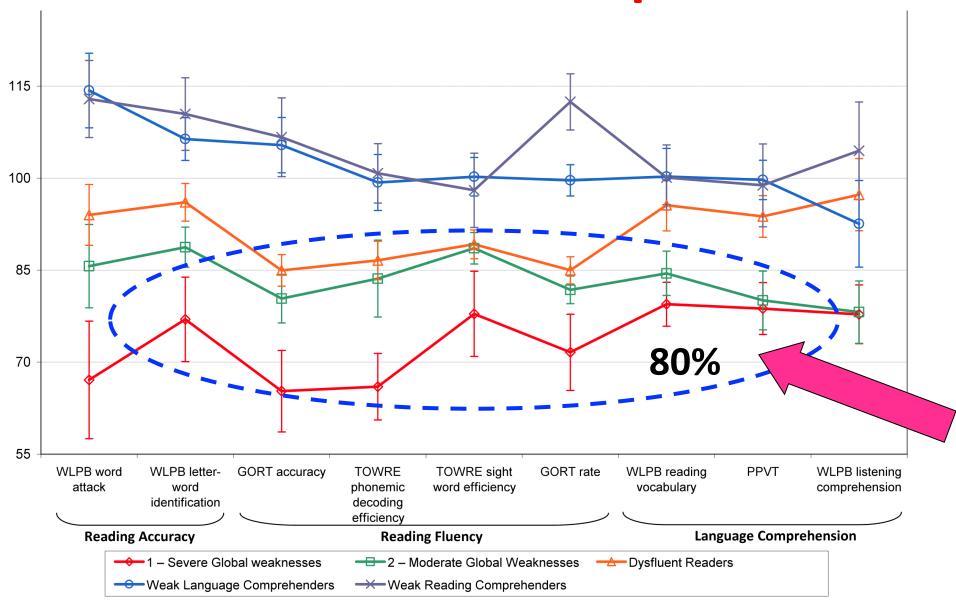


Exhibit #2

(A little theory)

LANGUAGE COMPREHENSION

BACKGROUND KNOWLEDGE (facts, concepts, etc.)

VOCABULARY (breadth, precision, links, etc.)

LANGUAGE STRUCTURES (syntax, semantics, etc.)

VERBAL REASONING (inference, metaphor, etc.)

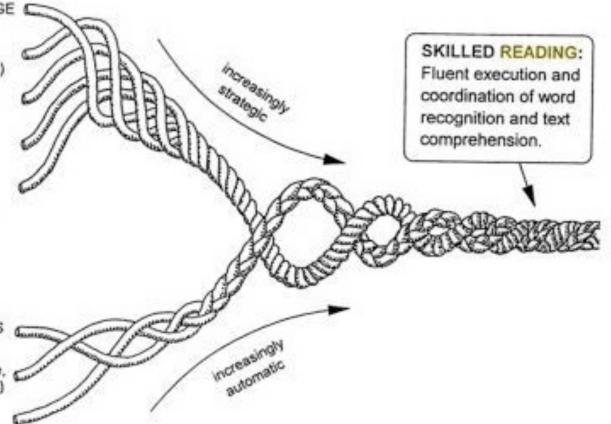
LITERACY KNOWLEDGE (print concepts, genres, etc.)

WORD RECOGNITION

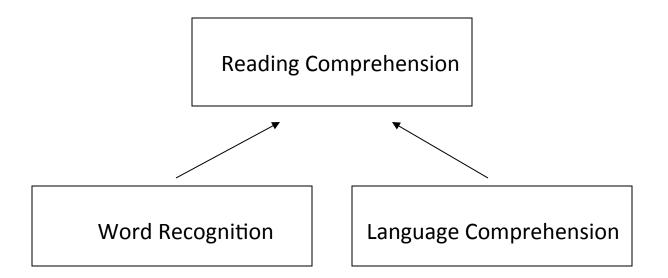
PHONOLOGICAL AWARENESS (syllables, phonemes, etc.)

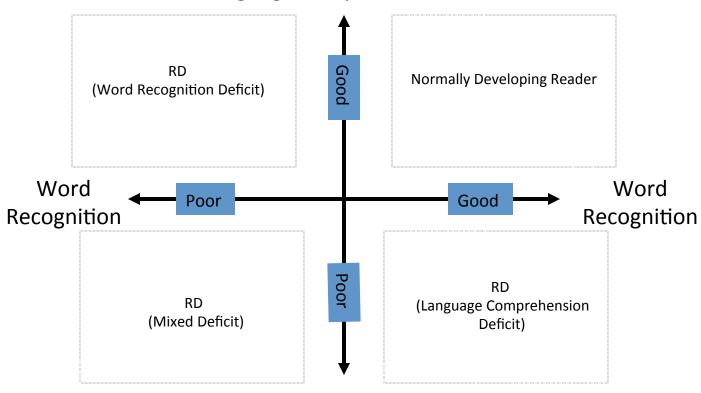
DECODING (alphabetic principle, spelling-sound correspondences)

SIGHT RECOGNITION (of familiar words)

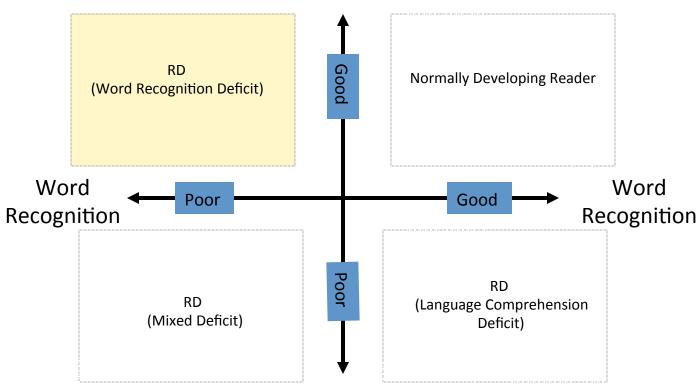


The Simple View of Reading

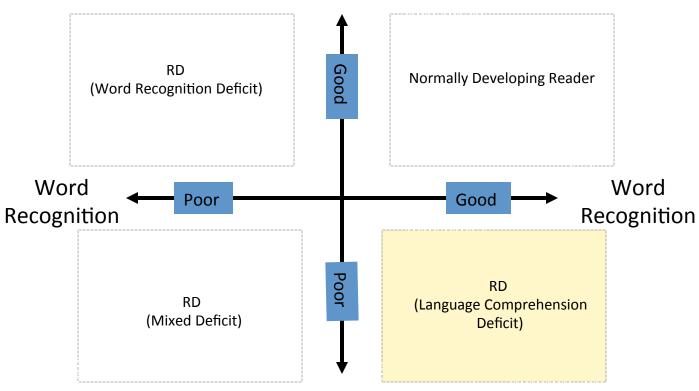




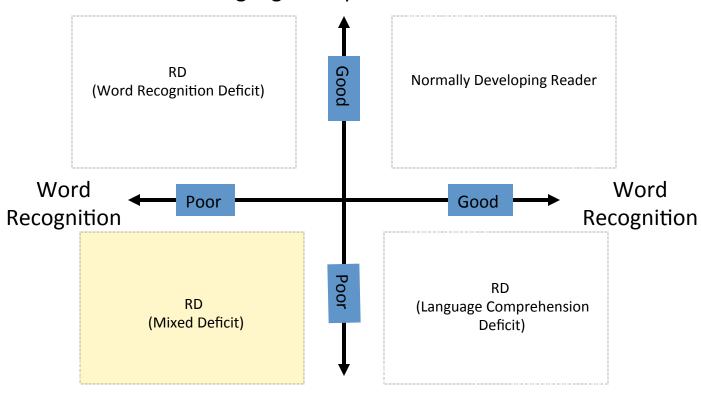
Language Comprehension



Language Comprehension

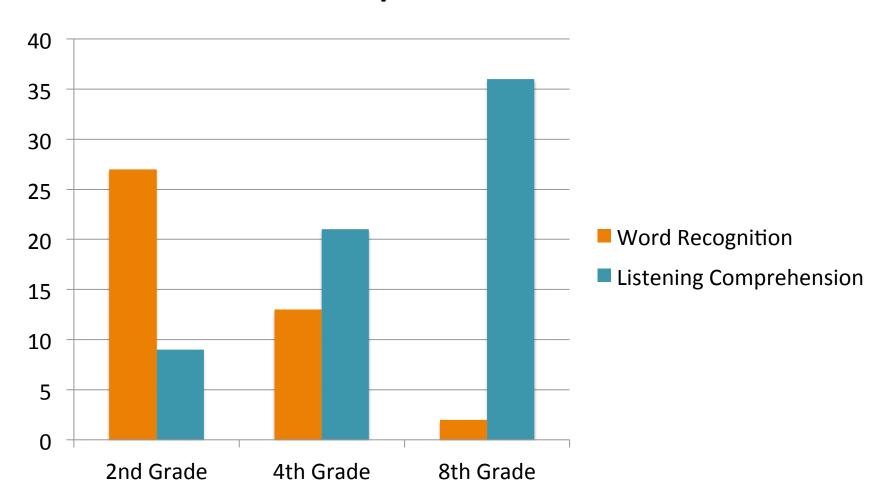


Language Comprehension



Language Comprehension

Developmental Changes in Reading Comprehension



Reading comprehension and language comprehension scores are virtually synonymous in the later grades.

Abstract & Multi-meaning Words

Grade 2	Grade 5	Grade 8	Grade 11
Bride	Alien	Benediction	Avarice
Island	Guilt	Legions	Insurgents
Pennies	Plateau	Periscope	Scourge
Perfume	Prey	Petition	subjugation
Loom	Imitation	Manifold	ostentation

Longer and More Complex Sentences

- Longer noun phrases Carrie, apartment hunter extraordinaire, finally found the perfect place.
- Linking of clauses and sentences with conjunctions (after, and, both....)
- Linking of clauses or sentences using adverbial conjuncts (e.g., accordingly, nonetheless, predictably...)

Language Reasoning

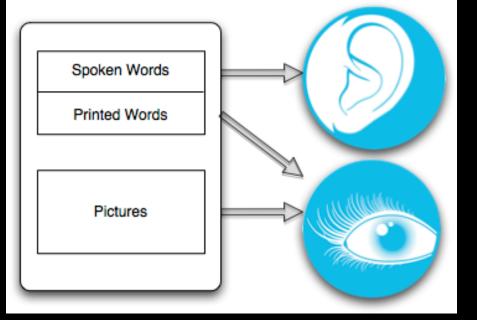
- Idioms
 - e.g., "Keep your nose clean"
- Analogies
 - e.g., Train: Track :: Boat : Water
- Sarcasm
 - e.g., "I just love evening traffic."

COH-METRIX— University of Memphis

Coh-Metrix2.1 Last updated: July 18th, 2008 For the best effect, use IE 5.0 or above. Title history 1. Enter the "Title" you wish to give to your study. 2. Select the genre you feel most closely describes your work. Genre Informational 3. Enter the source of the document. Where did you get this text? Source HS text 4. Enter a "Jobcode". You may make up your own job code. You need to remember this job code to later retrieve your Job Code World results. LSA Space Encyclopedia 5. Coh-Metrix uses Latent Semantic Analysis (LSA) in some of its indices. Your text will be analyzed slightly differently While peace efforts were under way, powerful depending on the space (discourse type) that you choose. Please select a LSA Space you feel most closely describes forces were pushing Europe towards war. Spurred your work. If you are not sure which space to use, we recommend you select "College Level". by distrust of one another, the great powers of Europe-Germany, Austria-Hungary, Italy, Britain, Frances, and Russia-signed treaties **Entering your Text** pledging to defend one anther. These alliances were intended to promote peace by creating You may write OR cut and paste text. powerful combinations that no one would dare 2. Please try to limit text to a maximum of 15,000 characters and remove irregular characters. attack. In the end, they had the opposite 3. Paragraphs are marked by hard returns. effect. Two huge alliances emerged. 4. Press "Submit" and Coh-Metrix will analyze your text. Economic rivalries helped sour the international atmosphere. Germany, the newest Viewing and Understanding your Results of the great powers, was growing into an economic and military powerhouse. Britain felt 1. When Coh-Metrix has analyzed your text the results will appear on the right side of the screen. threatened by its rapid economic growth. 2. You may continue to enter and submit text on this screen. The results will continue to appear on the right side of the Germany, in turn, thought the other great powers did not give it enough respect. Germany screen. also feared that when Russia caught up to other industrialized nations, its huge population and Viewing Past Results vast supply of natural resources would make it an unheatable competitor To view past results, Click the "Data Viewer" link at the bottom left of the screen (next to the Submit button). You will then Data Viewer Submit be directed to a new page where you can retrieve your past data. Reset

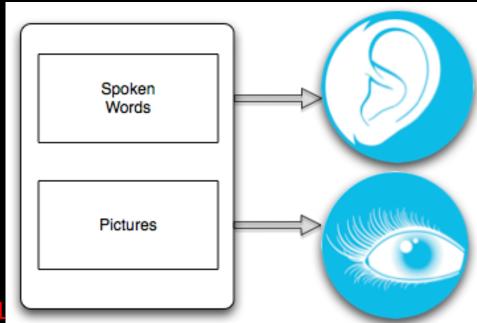
62 INDICES

7	Causal content	CAUSVP		Incidence of causal verbs, links, and particles
8	Causal cohesion	CAUSC	0.353	Ratio of causal particles to causal verbs (cp divided by cv+1)
9	Pos. additive connectives	CONADpi	41.219	Incidence of positive additive connectives
10	Pos. temporal connectives	CONTPpi	10.753	Incidence of positive temporal connectives
11	Pos. causal connectives	CONCSpi	19.713	Incidence of positive causal connectives
12	Neg. additive connectives	CONADni	3.584	Incidence of negative additive connectives
13	Neg. temporal connectives	CONTPni	0	Incidence of negative temporal connectives
14	Neg. causal connectives	CONCSni	1.792	Incidence of negative causal connectives
15	All connectives	CONI	73 4 77	Incidence of all connectives
16	Adjacent argument overlap	CREFAIu	0.5	Argument Overlap, adjacent, unweighted
17	Adjacent stem overlap	CREFS1u	0.632	Stem Overlap, adjacent, unweighted
18	Adjacent anaphor reference	CREFP1u	0.184	Anaphor reference, adjacent, unweighted
19	Argument overlap	CREFAau	0.31	Argument Overlap, all distances, unweighted
20	Stem overlap	CREFSau	0 4 15	Stem Overlap, all distances, unweighted
21	Anaphor reference	CREFPau	0.067	Anaphor reference, all distances, unweighted
22	NP incidence	DENSNP	299.283	Noun Phrase Incidence Score (per thousand words)
23	Pronoun ratio	DENSPR2	0.1 1 4	Ratio of pronouns to noun phrases
24	Conditional operators	DENCONDI	1.792	Number of conditional expressions, incidence score
25	Negations	DENNEGI	5.376	Number of negations, incidence score
26	Logic operators	DENLOGI	39 4 27	Logical operator incidence score (and + if + or + cond + neg)



Reduced Cognitive Load

Higher Cognitive Load



Paivio, 1986; Sweller & Chandler, 1991

Triarchic Model of Cognitive Load (DeLeeuw & Mayer, 2008)	Research-Based Instructional Design Principles (Mayer, 2009)	Brief Description of Mayer's Instructional Design Principles (Mayer, 2009)
Limit	Coherence Principle	Learning is enhanced when irrelevant or
Extraneous		extraneous information is excluded
Processing	Signaling Principle	Learning is enhanced when explicit cues are
		provided that signal the beginning of major
		headings or elements of the material being covered
	Redundancy	Learning is enhanced when extensive text
	Principle	(transcription) on screen along with spoken
		words and pictures is not used. Carefully selected
		words or short phrases, however, augment
	Santial Cartinoites	retention (Mayer & Johnson, 2008)
	Spatial Contiguity	Learning is enhanced when on-screen text and
	Principle	pictures are presented in close proximity to one another to limit eye shifting during instructional
		presentations
	Temporal	Learning is enhanced when pictures and text
	Contiguity Principle	correspond to the audio presentation
		-
Manage	Modality Principle	Learning is enhanced when spoken words and
Essential		pictures are used as part of instruction
Processing	Segmenting	Learning is enhanced when multimedia
	Principle	presentations are divided into short bursts (5-7
		minutes) as opposed to longer modules
	Pretraining Principle	Learning is enhanced when instructional
		messages contain an orienting message to
_	26.11	introduce the forthcoming content
Foster	Multimedia	Learning is enhanced when pictures and spoken
Generative	Principle	words are used instead of words alone
Processing	Personalization,	Learning is enhanced when narration is presented
	Voice, and Image	in a conversational style instead of more formal
	Principles	audio presentations

Mayer's Validated Instructional Design Principles

Continuum of Literacy Instruction

CONTENT CLASSES

- Enhanced Content Instruction
- Embedded Strategy Instruction

SUPPLEMENTAL CLASSES

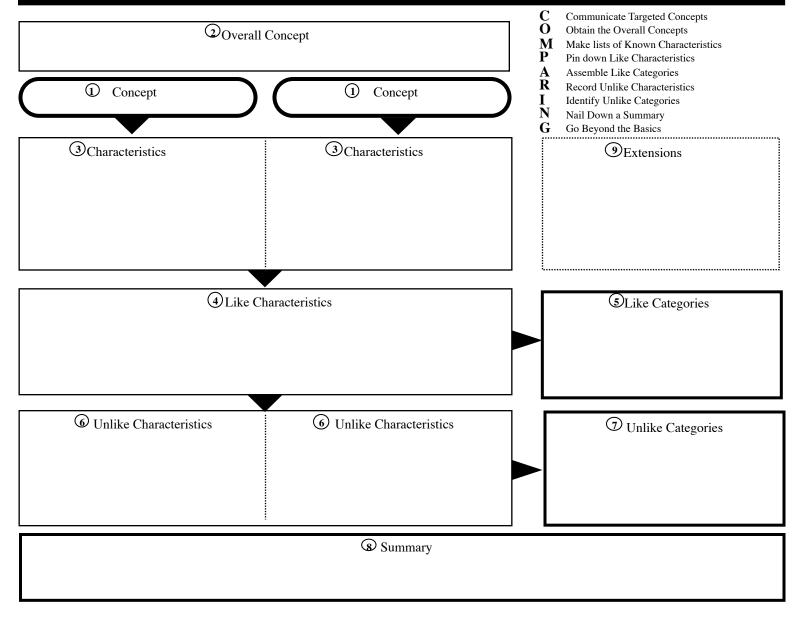
- Intensive Skill Instruction
- Intensive Strategy Instruction

SMALL GROUP & INDIVIDUALIZED

• Intensive Intervention

Improved Literacy

Comparison Table



FACTS

Strategic thinking prompts

CATEGORIZATION

Comparison rable

Overall Concept

Economic Causes of Sectionalism in the U.S. in 1860

① Concept
Economic conditions in the North

① Concept
Economic conditions in the South

(3) Characteristics

Good ports
Good natural resources
Immigrants in labor force
Profit from industries
Good land transportation
Good credit with other countries

3 Characteristics

Good ports
Good natural resources
Slaves in labor force
Profit from growing cotton
Poor land transportation
Good credit with other countries

4 Like Characteristics

Good ports
Good natural resources
Good credit with other countries

6 Unlike Characteristics

Immigrants in labor force
Profit from industries
Good land transportation

6 Unlike Characteristics

Slaves in labor force Profit from growing cotton

Poor land transportation

Summary

Economic conditions in the North and South in 1860 were alike because both had good natural resources, ports, and credit. Their primary sources of labor and profits were different, as was the quality of their land transportation.

C Communicate Targeted ConceptsO Obtain the Overall Concepts

Make lists of Known Characteristics

Pin down Like Characteristics

A Assemble Like Categories

R Record Unlike Characteristics

Identify Unlike Categories

Nail Down a Summary
G Go Beyond the Basics

©Extensions

Study the economic conditions of the West in 1860, and create a list of characteristics to be compared to the North &

5 Like Categories

Quality of ports
Quality of natural resources
Quality of credit

① Unlike Categories

Primary source of labor Source of profits Quality of land transportation



Sourcing

Context

Minister of Mil.

IN CONGRESS have a me

Cofe unanimous Pedaration - States of America

• Corroboration

Agent Spice Berry Sand fill March Street the same in the court has been a description.

Intense-Explicit Instruction (RTI)

Tier 1

- Cue
- Do
- Review

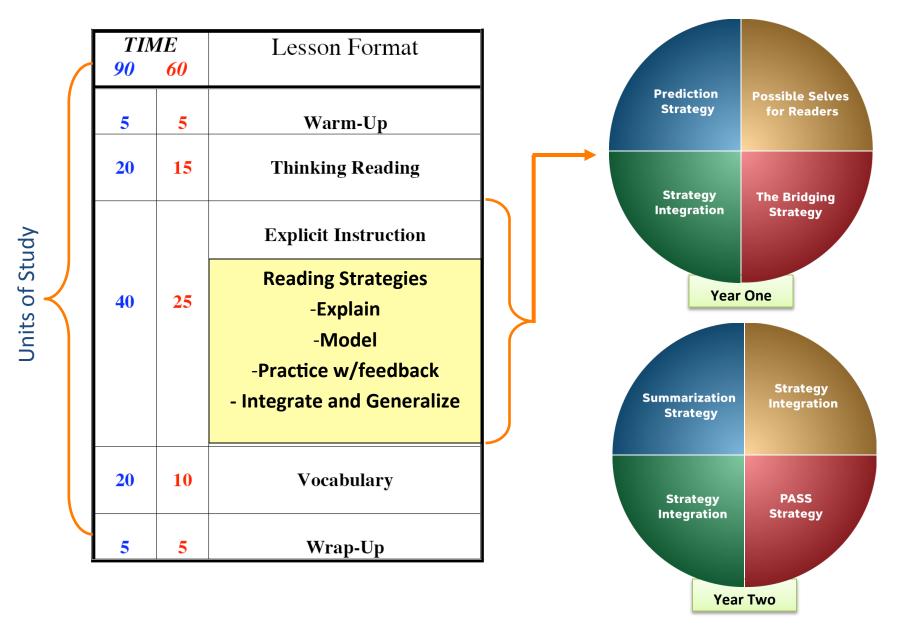
<u>Tier 1</u>

- "I do it!" (Learn by watching)
- "We do it!" (Learn by <u>sharing</u>)
- "You do it! (Learn by practicing)

Tier 2 & 3

- Pretest
- Describe
 - Commitment (student & teacher)
 - Goals
 - High expectations
- Model
- Practice and quality feedback
 - Controlled and advanced
- Posttest & reflect
- Generalize, transfer, apply

Establishing The Course



The Summarization Strategy

A Strategy for summarizing multiple paragraphs in a section, book, or passage

The Summarization Strategy

Pre Reading

Review the Selection

Look for clues
Think about what you already know Identify some questions

Thinking about the Reading

Evaluate the Paragraphs

Read a key paragraph Identify the topic Highlight what the paragraph was mostly about Highlight the two most important details

Telling about the Reading

Answer with a Paraphrase

This paragraph is mainly about....
One important detail is
Another important detail is

(Repeat "E" & "A" until ALL KEY paragraphs have been analyzed)

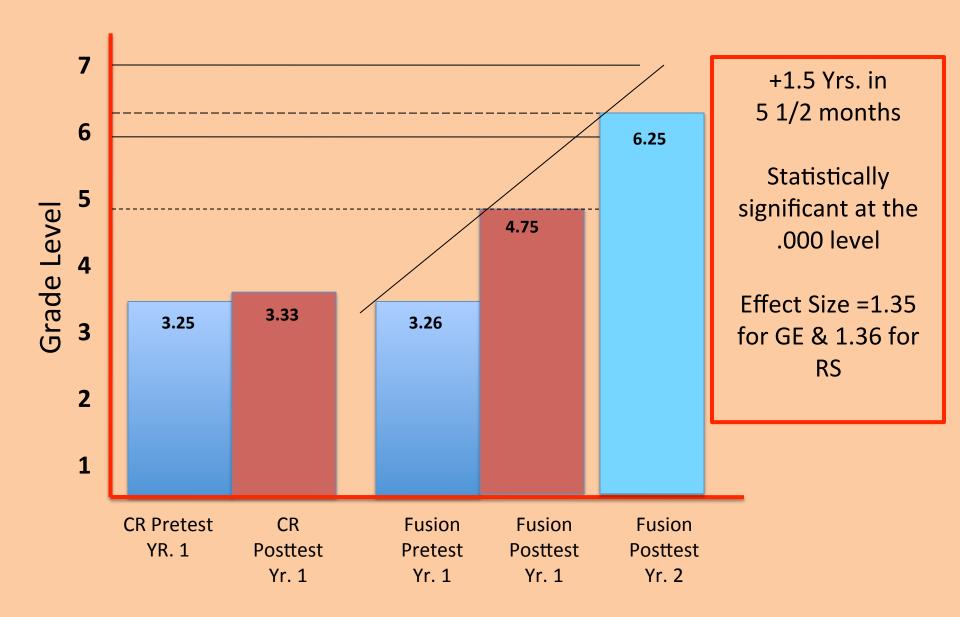
Reflecting on the "Big Ideas"

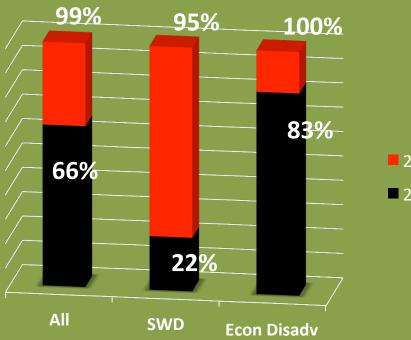
Determine a summary

What was the selection mostly about? What new information did you learn?

Quasi-Experimental Study: GRADE Total Test Score

40 Students with LD in Grade 6





Algebra I

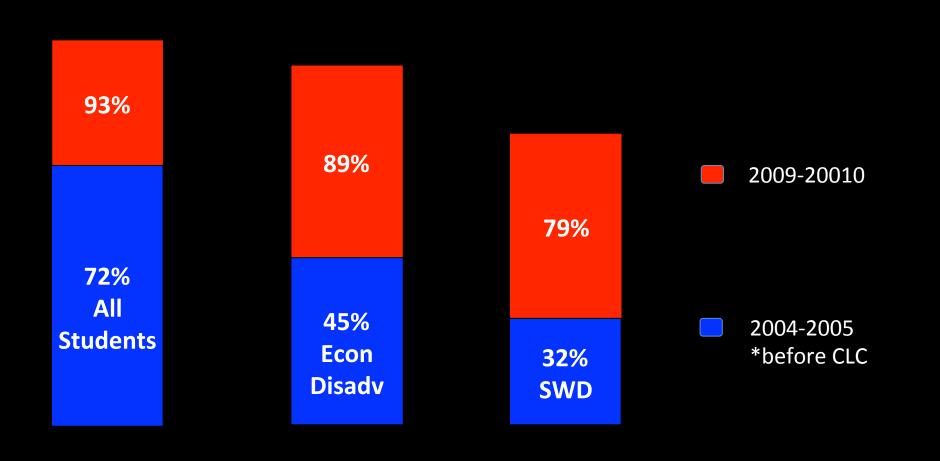
2009-2010

2004-2005





Central Middle School SOL Reading Scores



Continuum of Literacy Instruction

CONTENT CLASSES

- Enhanced Content Instruction
- Embedded Strategy Instruction

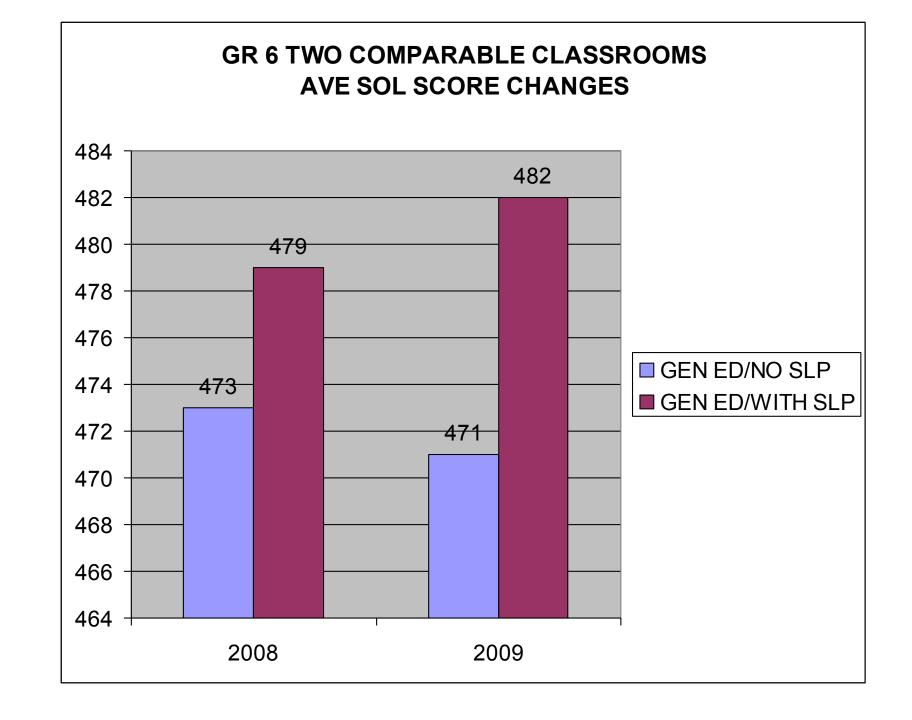
SUPPLEMENTAL CLASSES

- Intensive Strategy Instruction
- Intensive Basic Skill Instruction

SMALL GROUP & INDIVIDUAL

• Intensive Therapeutic Intervention

Improved Literacy



Vocabulary & Text Processing

Word Mapping Strategy

Monica Harris

Purpose

To expand students vocabulary by helping them predict the meanings of unknown words using key language elements (roots, prefixes, suffixes) they come across while reading.

Word Families

"port" – to carry

import export report porter deport support

important transport

Most Common

 Focus is on the use of high frequency prefixes, suffixes, and roots.

Strategy Elements

- Provide a systematic approach for students to use.
- Focus on the use of *high frequency* prefixes, suffixes, and roots.
- Use roots with large word families.

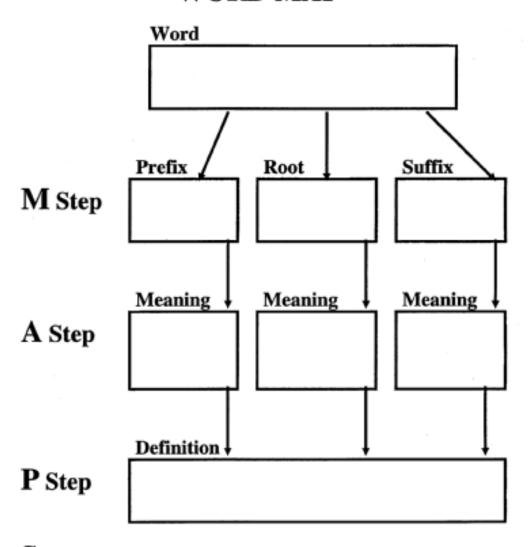
Word Mapping Strategy

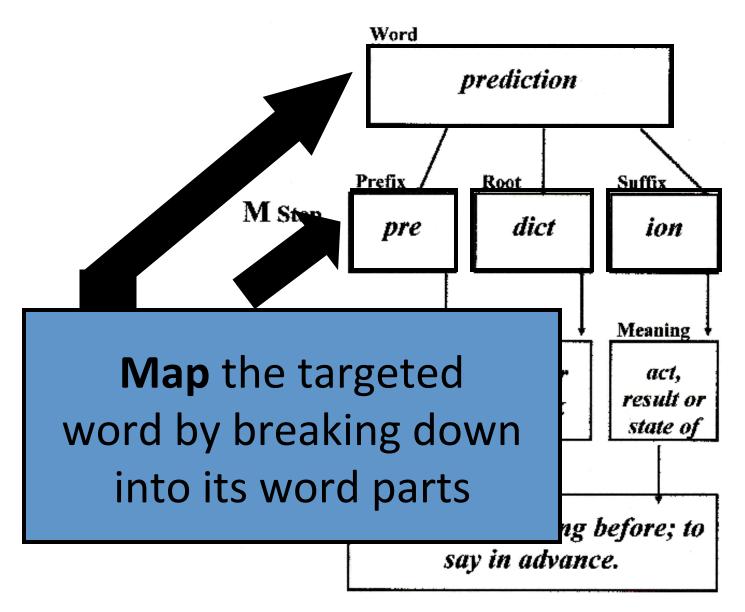
Step 1: **M** – Map the word parts

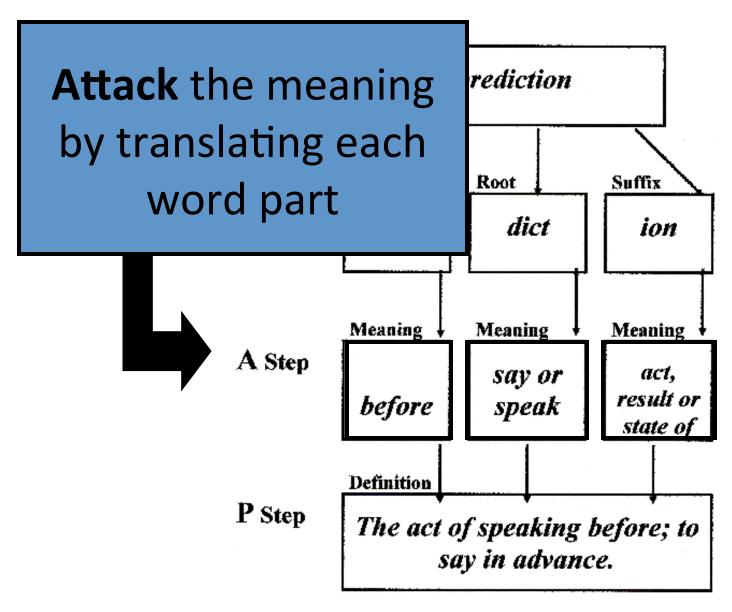
Step 2: **A** – Attack the meaning of each part

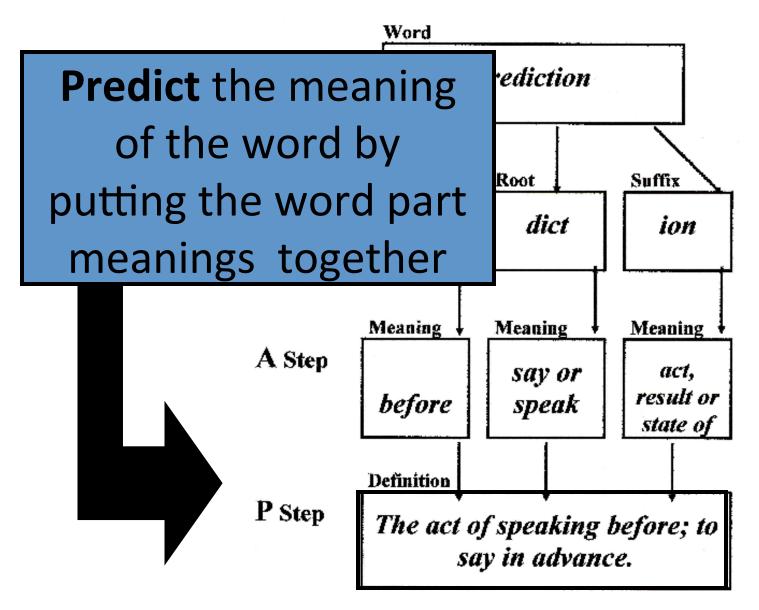
Step 3: **P** – Predict the word's meaning

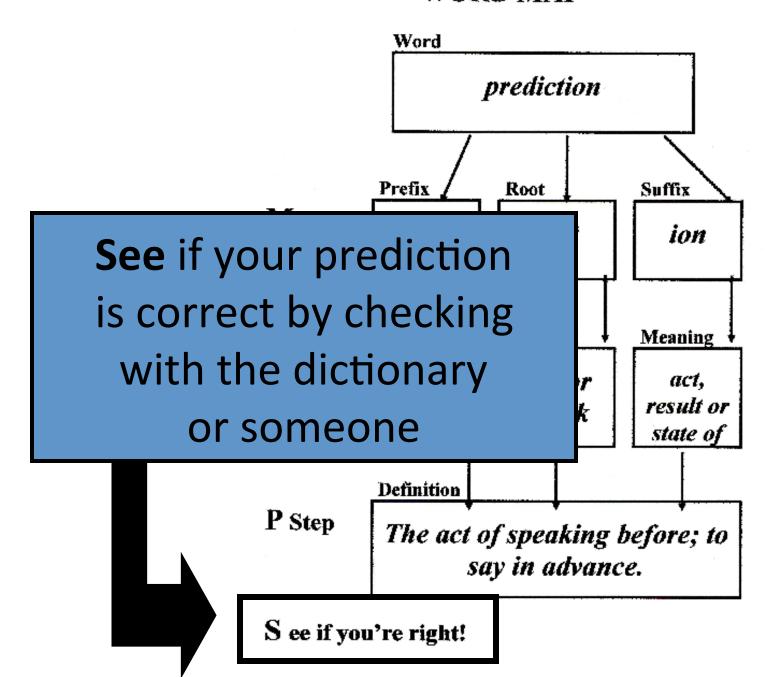
Step 4: **S** – See if you're right!

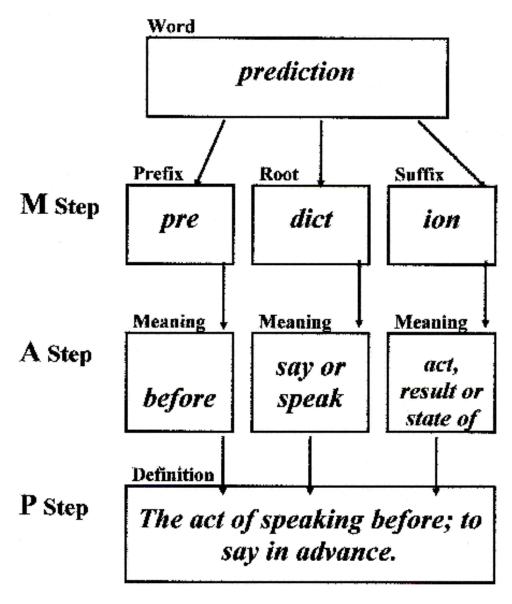












Lessons

- Lesson 1: Prefixes
- Lesson 2: Suffixes
- Lesson 3: Roots
- Lesson 4: Word Mapping Strategy

Outcomes

- To have students:
 - recognize the meaning of word parts easily
 - map words in their minds independently
 - unlock the meaning of unknown words

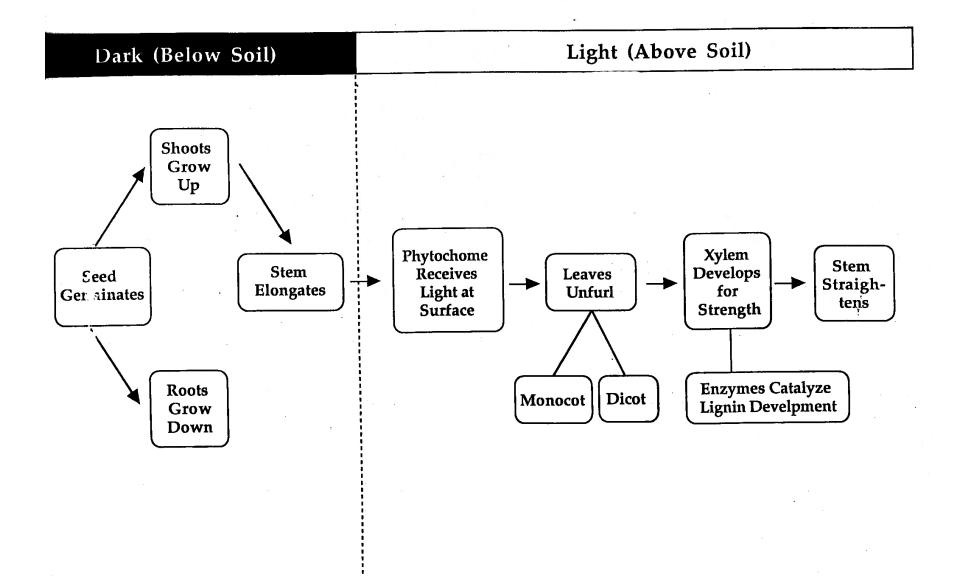
The ORDER Routine:

Creating Meaning With Graphic Organizers

The ORDER ROUTINE

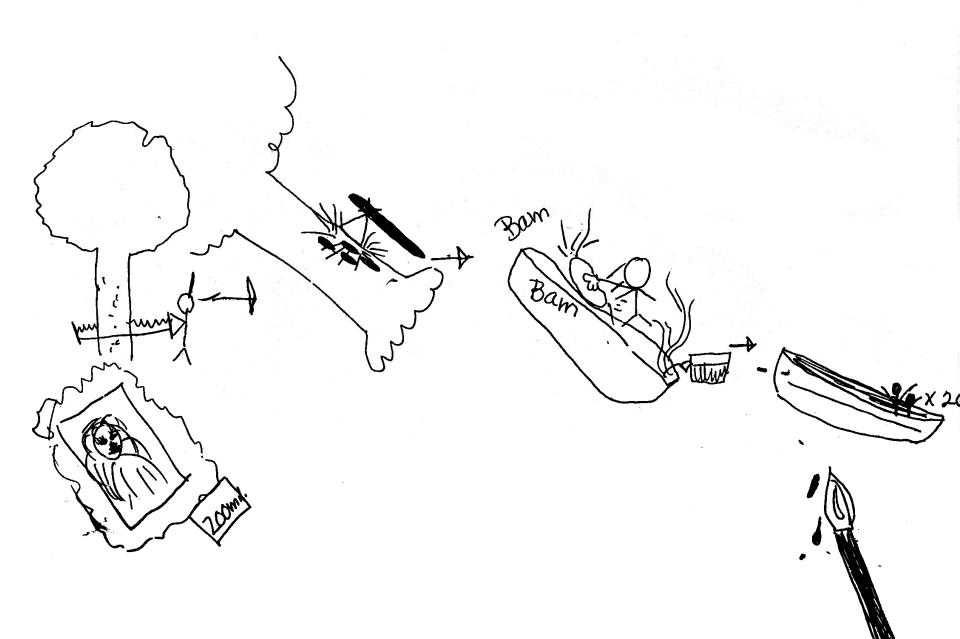
Creating Meaning with Graphic Organizers

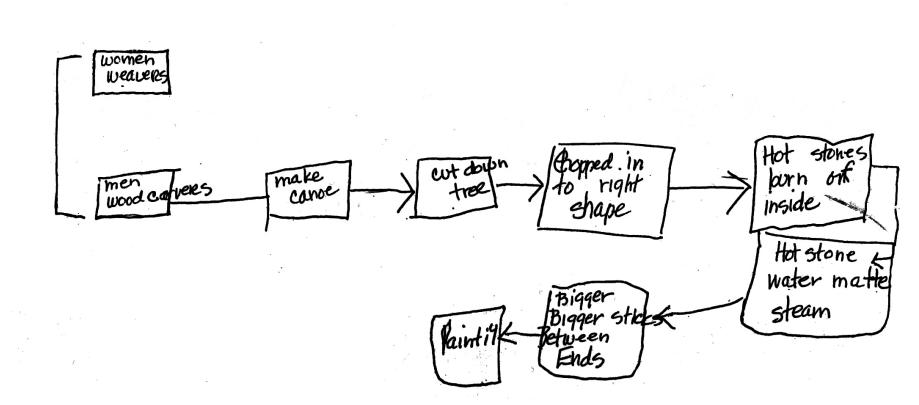
How a Seedling Begins Life



Grade 8
Pretest







Overview & Things to Think About

- <u>Purpose of routine</u> -- stand back, manipulate, repackage (3M Principle)
- Prerequisites for teaching?
- Types of students who would benefit the most?
- How relevant are the behaviors taught to the realities students and teachers face today?

What is the ORDER Routine?

- A way to help students decide what information from a lecture or reading assignment is important to know.
- A way to help students draw a graphic organizer that depicts key pieces of information and their relationships.
- A way to help students use information in a graphic organizer.

Components of the Routine

The ORDER Device

The Linking Steps

• The Cue-Do-Review Sequence

The Linking Steps

Open your mind and take notes

Recommend a structure

Draw an organizer

Decide on the important information

Recheck the structure

Assign markers

Work out an organizer

Explain it

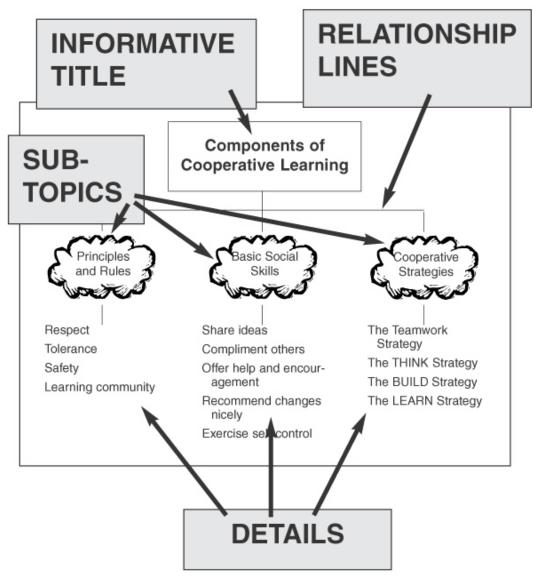
Recycle it

When Do You Use the Routine?

Within the context of regular instruction to help students understand the relationships that exist among critical information that:

- Is sequential in nature
- Compares and contrasts
- Describes major elements of an important concept
- Presents a problem and possible solutions

Common Elements of ORDER Devices



The Four Main Types of ORDER Devices

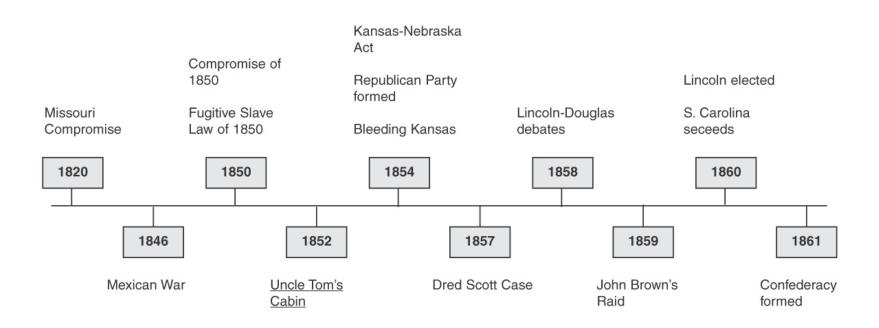
- Sequential
- Compare-and-Contrast
- Descriptive
- Problem-Solution

The Sequential Organizer

Displays information that is organized according to:

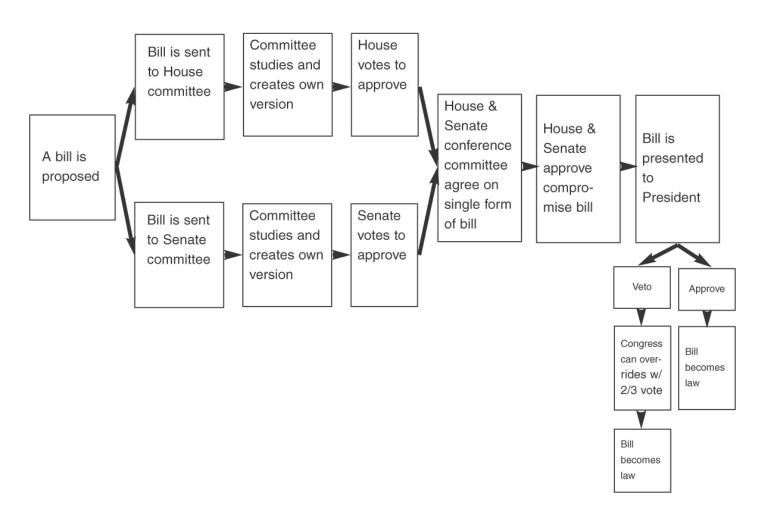
- Time
- Distance
- Natural order
- Cause-and-effect relationships

Example Sequential Organizer as a Timeline Events leading up to U.S. Civil War

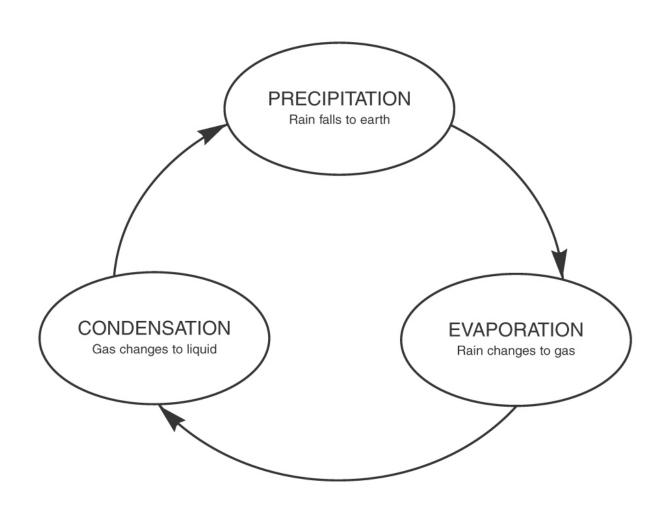


Example Sequential Organizer as a Flow Chart

How a Bill Becomes a Law



Example Sequential Organizer as a Cycle The Water Cycle

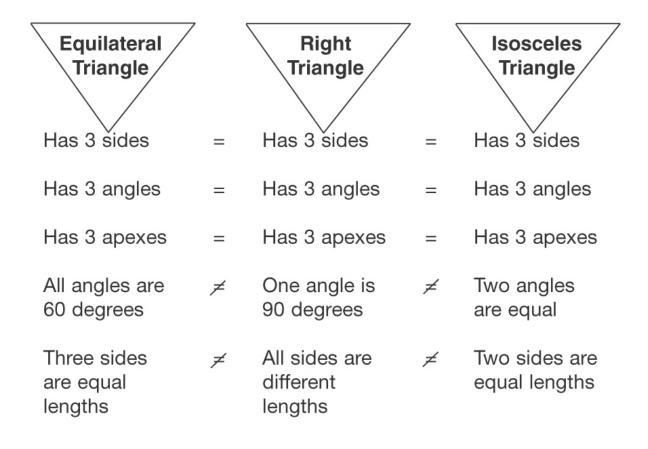


The Compare-and-Contrast Organizer

 Displays information in which two or more topics are compared and/or contrasted.

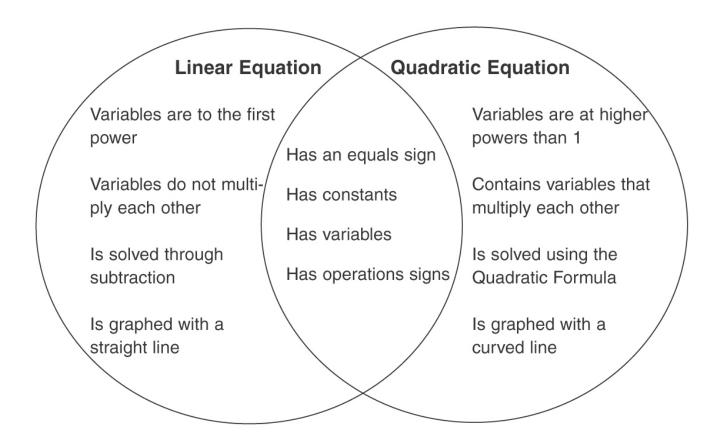
Example Compare-and-Contrast Organizer

How Equilateral, Right, and Isosceles Triangles Are Alike and Different



Example Compare-and-Contrast Organizer

The Differences and Similarities of Linear Equations and Quadratic Equations



Example Compare-and-Contrast Organizer

Ways the Powers of the Federal and State Governments in the United States Are Alike and Different

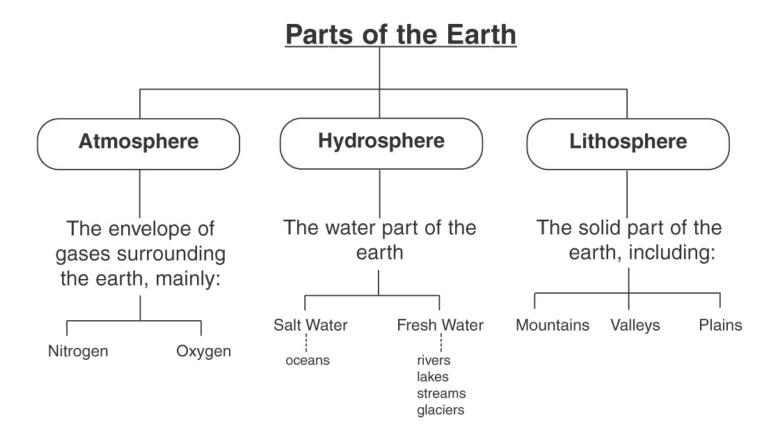
	Federal	State
Power to collect taxes?	YES	YES
Able to declare & wage war?	YES	NO
Able to raise & support armed forces?	YES	YES
Able to make laws?	YES	YES
Able to punish violators of laws?	YES	YES

The Descriptive Organizer

 Categorizes information about a topic according to common features or similar characteristics.

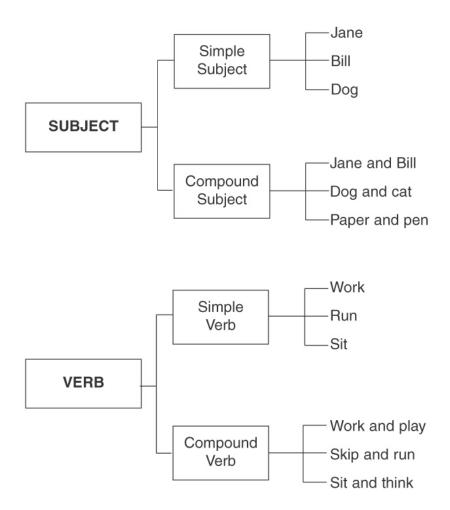
Typically contains both subtopics and details.

Example Descriptive Organizer



Example Descriptive Organizer

Parts of a Simple Sentence

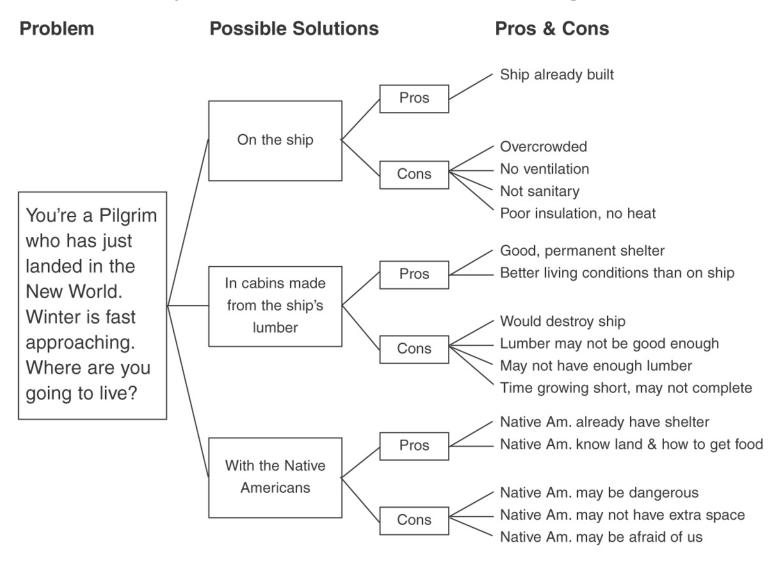


The Problem-Solution Organizer

 Depicts a problem and possible solutions to a problem.

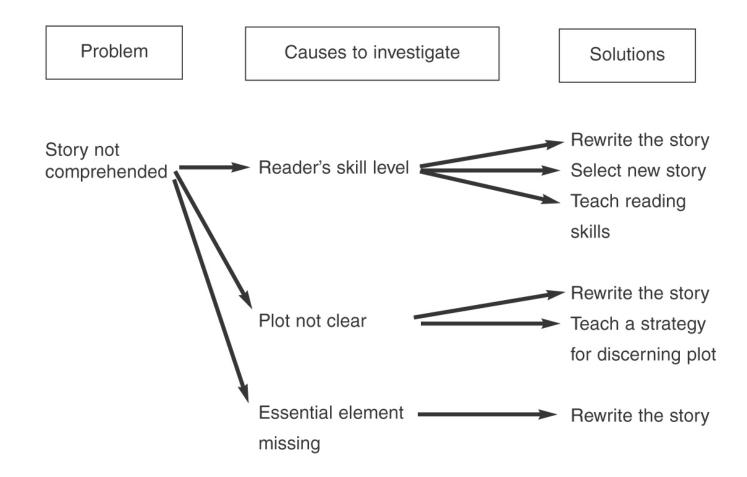
 Can also depict pros and cons, consequences, and related details for each solution.

Example Problem-Solution Organizer



Example Problem-Solution Organizer

Possible Problems with Reading Narrative Stories



The Linking Steps

 The procedures the teacher uses to guide the development of an ORDER Device with students in an interactive way.

The Linking Steps

Open your mind and take notes

Recommend a structure

Draw an organizer

Decide on the important information

Recheck the structure

Assign markers

Work out an organizer

Explain it

Recycle it

Constructing Your Draft

- 1. Group the targeted information into broader categories.
- 2. Select or verify the structure of the organizer.
- 3. Assign markers.
- 4. Work out an organizer.
- 5. Evaluate your organizer.

Organizer Checklist, Section 1

Section I: Important Parts Informative Title. The title specifically states what information the organizer covers. **Critical Content.** The most important information for understanding the topic of the organizer is displayed as subtopics and details. All subtopics and details are factually correct. Clear Relationships Among Information. The organizer includes arrows, lines, numbers, and other symbols that show how pieces of information on the organizer relate to other information.

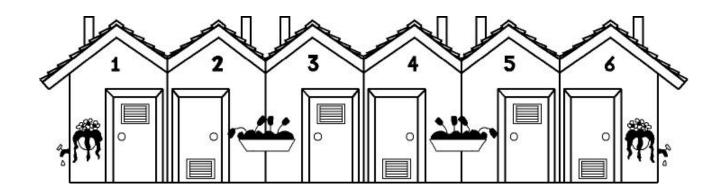
Organizer Checklist, Section 2

Sectio	n II: Quality
	All Essential Information. All information marked in notes as important is included on the organizer.
	Appropriate Organization. The correct type of organizer has been selected to display the information.
	Information in Correct Place. All information appears in the correct place.
	Legible Information. Handwriting and overall appearance are neat enough so anyone can read the organizer.

Introduce Four Types of Graphic Organizers

- Describe how most information is organized.
- Describe common elements of all graphic organizers.
- Introduce and describe Sequential Organizers.
- Introduce and describe Compare-and-Contrast Organizers.
- Introduce and describe Descriptive Organizers.
- Introduce and describe Problem-Solution Organizers.

Optional Analogy for Sequential Devices



Row of Bath Houses and a Sequential Device

- Each contains different units that are linked together in a specific sequence.
- The sequence of units does not change.

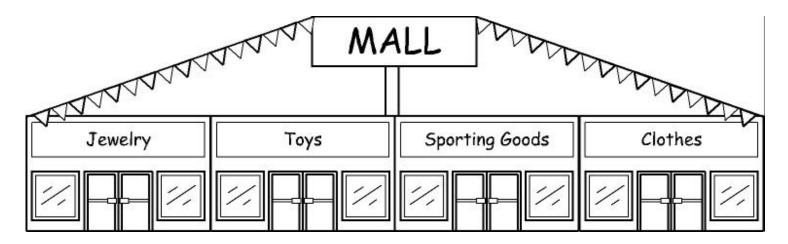
Optional Analogy for Compare-and-Contrast Devices



The Duplex and a Compare-and-Contrast Device

- Both have similarities and differences.
- Each unit of the duplex has same roof, same number of floors, same front yard.
- However, each unit's windows, doors, and porches are different.

Optional Analogy for Descriptive Devices



A Shopping Mall and a Descriptive Device

- Both have a name or title.
- Both have different categories of stores or information.
- Each category or store contains smaller items specific to it.

Optional Analogy for Problem-Solution Devices

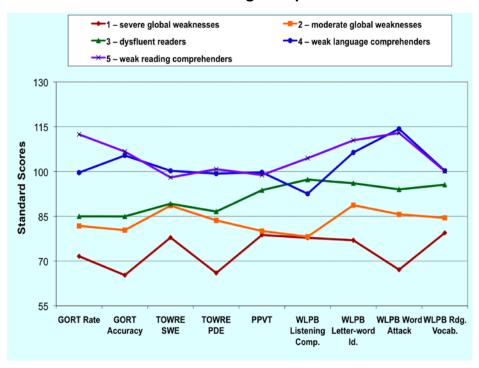


Different Ways to Cool a House and a Problem-Solution Device

- Every problem has at least one or more solutions.
- Each solution has both advantages and disadvantages.

What is the academic profile of the students in my school?

Profiles of Weak Reading Comprehenders



Brasseur-Hock, I. F., Hock, M. F., Kieffer, M., Biancarosa, G., Deshler, D. D. (2011). Adolescent struggling readers in urban schools: Results of a latent class analysis. *Learning and Individual Differences*, 20(3), 438-451.