Knowing and Applying the Science of Early Reading Instruction (K-3) in Tier 1 Classroom Instruction

WAVE CONFERENCE PRESENTATION
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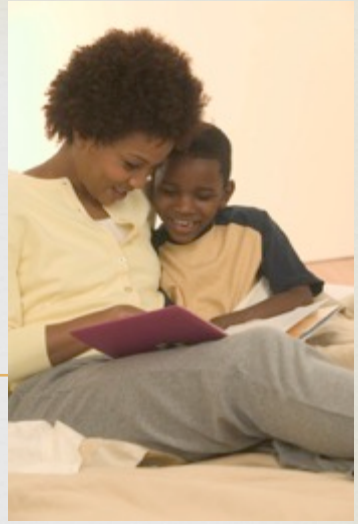
President 2017-2019
International Reading Hall of Fame
https://www.readinghalloffame.org/board-of-directors
William S. Gray Citation of Merit Winner 2019 – International Literacy Association
https://www.literacyworldwide.org/about-us/awards-grants/ila-william-s-gray-citation-of-merit

July 29, 2019

Learning to Read



Jake is 5 and learning to read.

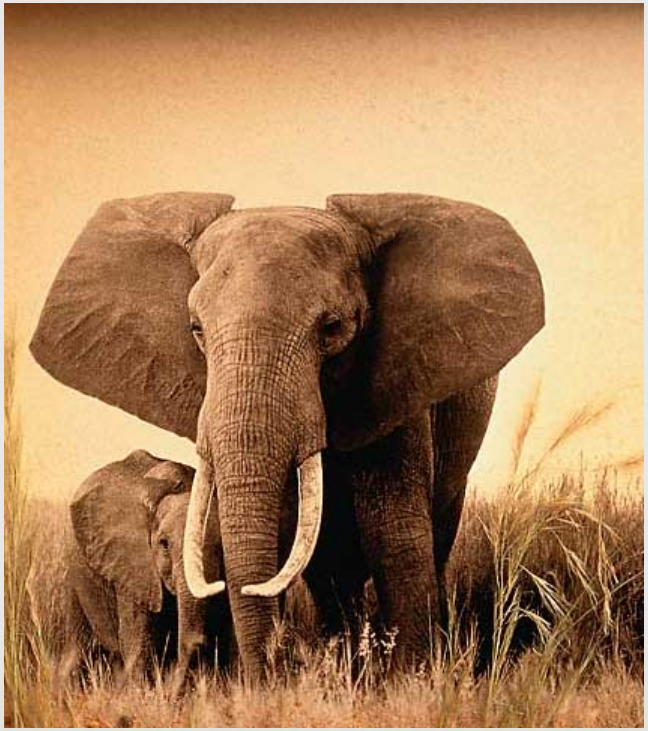
He points at a picture in a zoo book and says, "Look Mama! It's a frickin' Elephant!"

Deep breath…. "What did you call it?"

"It's a frickin' Elephant, Mama! It says so on the picture!"

And so it does…..

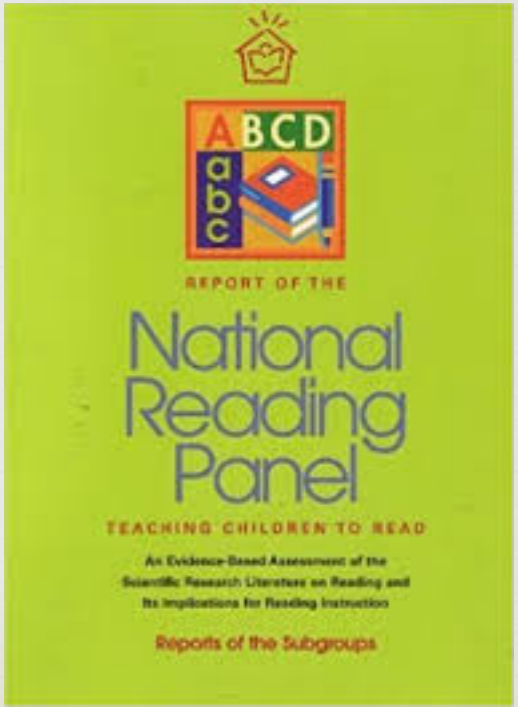
AFRICAN ELEPHANT



The Science of Early Reading Instruction (K-3)

- The **National Reading Panel** (2000) lists the following foundations of reading instruction as supported with scientific research for early reading:
  - Phonemic Awareness
  - Phonics
  - Fluency
  - Vocabulary*
  - Comprehension*

** These will not be a part of this presentation in the interest of time allotted.*



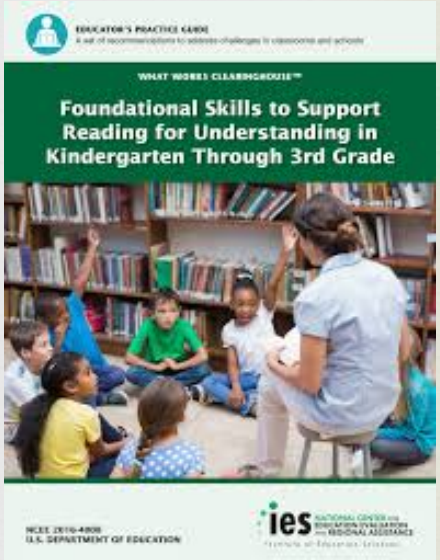
The Science of Early Reading Instruction (K-3)

- The **National Early Literacy Panel** (2008) lists the following additional foundations of reading instruction as supported with scientific research for early reading:
  - Oral Language*
  - Concepts About Print
  - Alphabetic Knowledge

* This will not be a part of this presentation due to time allotted.

The Science of Early Reading Instruction (K-3)

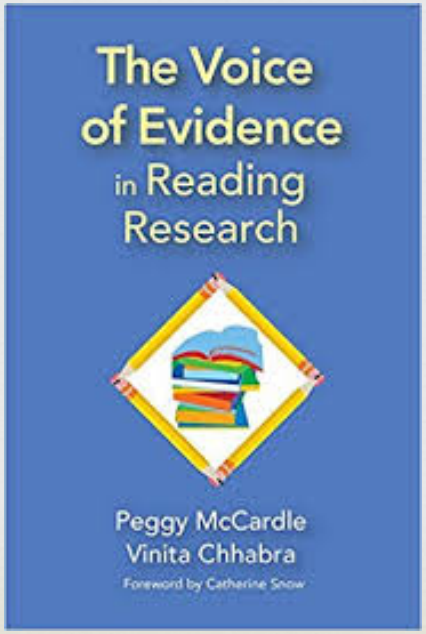
- The **Institute of Education Sciences** (2016) *Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade* lists the following additional foundations of reading instruction as supported with scientific research for early reading:
  - Academic Language vocabulary, inferential and narrative language.
  - Develop awareness of the segments of sounds in speech and how they link to letters.
  - Teach students to decode words, analyze word parts, and write and recognize words.
  - Ensure that each student reads connected text every day to support reading accuracy, fluency, and comprehension.



The Science of Early Reading Instruction (K-3)

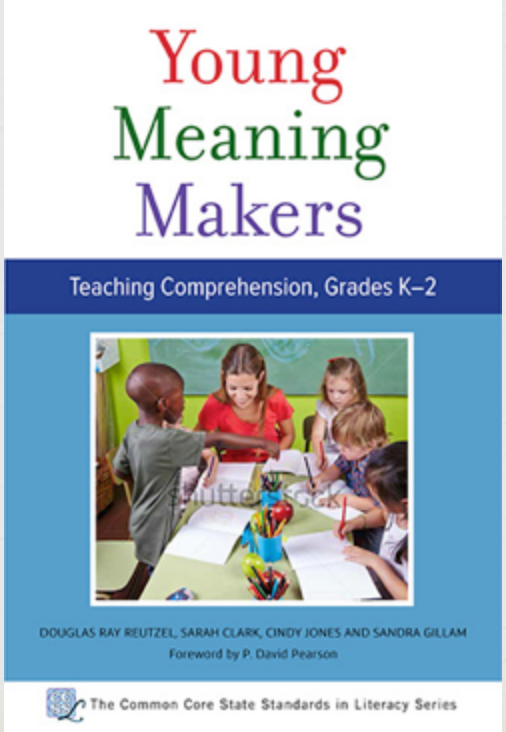
- Motivating Students to Reading : Evidence for Classroom Practices that Increase Reading Motivation and Achievement* (Gutherie & Humenick, 2004).

* This will not be a part of this presentation due to time allotted.



The Science of Early Reading Instruction (K-3)

- Early comprehension instruction requires rich theoretical understanding from teachers to be effective.



The Science of Early Reading Instruction (K-3)

Phonics

Phonics: National Reading Panel Findings

Practices as "Research-Validated" Phonics Instruction

- Systematic phonics instruction is a way of teaching reading that stresses the acquisition of letter-sound correspondences and their use to read and spell words.
- Systematic phonics instruction provides a .44 effect size difference than no phonics or unsystematic phonics instruction.
- There are five types of phonics instructional approaches: synthetic, analytic, embedded, analogy, & spelling.
- No one type of phonics instructional approach was found to be significantly superior to the other comparisons.

Phonics: National Reading Panel Findings

Practices as "Research-Validated" Phonics Instruction

- Phonics instruction is effective when it is taught systematically to children one-to-one, in small groups, or as a whole class.
- Phonics instruction provided early was significantly more effective than taught after first grade.
- Phonics instruction provided in kindergarten should be designed appropriately and build upon foundational knowledge of letters names, sounds, and phonemic awareness.
- Phonics instruction is particularly powerful in helping young children who are at-risk for future reading failure but is less effective in remediating reading failure.

Phonics: National Reading Panel Findings

Practices Recommended in the Report as "Research-Validated" Phonics Instruction

- Phonics instruction was helpful to children of all socio-economic classes (Low = .66 sd; Average = .44 sd).
- The most rigorously designed studies found that phonics instruction was a significant factor in promoting early reading growth.
- Phonics instruction should not focus on teaching letter-sound relationships but rather on putting these letter-sound relationships to work in reading and writing.
- Phonics instruction is a means to an end and does not constitute a comprehensive reading instructional program.

Phonics – Blending

- *Explanation*

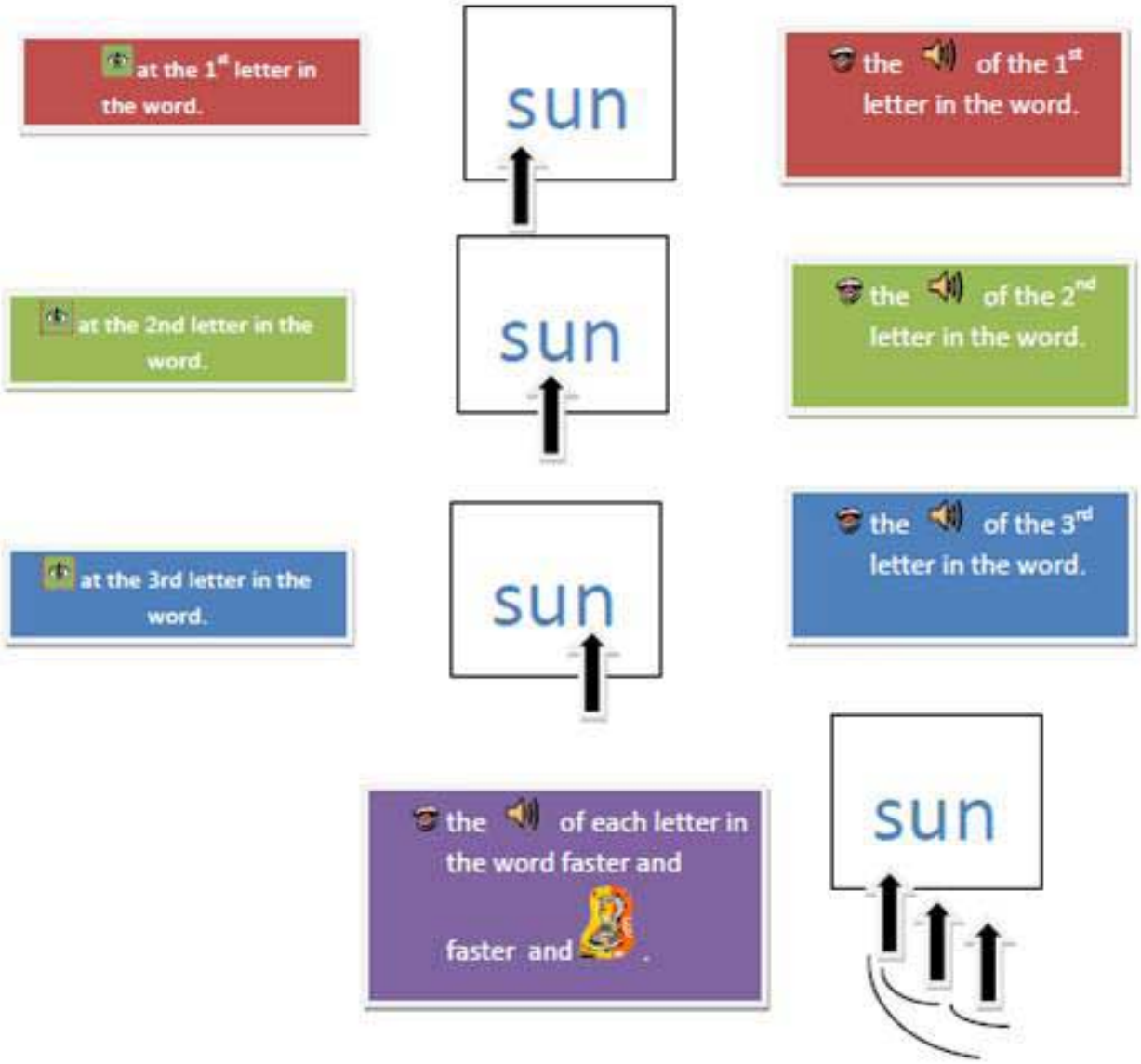
Today we will be learning how to blend the sounds of letters to say words. Blending the sounds of letters to say words is a very important part of learning how to read unfamiliar words. Blending words to read is one the important things you will learn in kindergarten and first grade to help you learn about many other things in school and in life.

Phonics – Blending

- ***Modeling***

I will model for you how to blend the sounds of letters in words. Here is a word, *fan*. I want to blend the sounds of the letters to say the word. To blend the letter sounds in this word I begin with the first letter in the word – *f* (point to the letter). I think to myself, this is the letter *f* and I know that the sound that this letter makes is /f/. So, I say /f/. I look at the second letter in the word – *a* (point to the letter). I need to learn a hint about three letter words with a vowel letter in the middle, the hint is this - the middle vowel letter in a three letter word makes its sound. So, I think to myself, this is the letter *a* it makes the /a/ sound. So, I say /a/. Then I say the first sound in the word, /f/ and then the second sound in the word, /a/. Next I look at the third letter in the word – *n* (point to the letter). I think to myself, this is the letter *n* and I know that the sound that this letter makes is /n/. Then I say the first sound in the word, /f/ and then the second sound in the word, /a/, and the third sound in the word, /n/. Then I say the three sounds in order again a little faster like this, /f/ /a/ /n/. I say them again even faster…. I listen as I say them faster and begin to blend the sounds together to hear a word…. the word I hear when I say the sounds in order fast is /fan/.

Phonics – Blending



Phonics – Multi-Syllabic Blending

- ***Explanation***

Today we will be learning how to blend the sounds of letters to say words. Blending the sounds of letters to say words is a very important part of learning how to read unfamiliar words. Blending words to read is one the important things you will learn in kindergarten and first grade to help you learn about many other things in school and in life.

Phonics – Multi-Syllabic Blending

- ***Modeling***

I will model for you how to blend the parts of words to say big words. Here is a word, *con<u>fi</u>rm*. I want to blend the parts of the word to say a big word. To blend the parts of this word I look for the vowels (Model underlining the vowels in the word). Once I have found the vowels in the word, break the word into parts around the vowels. Never divide double vowels, e.g. oi, ai, oa, ee or consonant digraphs, e.g. ph, ch, wh, th, sh. We can divide between double consonants that are not consonant digraphs.

In the word confirm there are two vowels – o and i. So, if I divide this word around the vowels o and i and between two consonants that are not a consonant digraph, I could divide the word confirm as con/firn. To say this big word, I say the sound for each letter in the first word part, c/o/n. Next I blend the three sounds to say the word part – con. Next I say each letter sound in the second word part – f/ir/m. Then I blend the three sounds to say the word part, firm. Last, I say the two word parts con and firm. When I blend these two word parts together I say the word, confirm.

Phonics – Multi-Syllabic Blending

Look for the vowels in the word and underline them – elephant

↓

Break the word into chunks around the vowels (Note: Never divide double vowels, e.g. oi, ai, oa, ee or consonant digraphs, e.g. ph, ch, wh, th, sh. We can divide between double consonants that are not consonant digraphs.) - e/leph/ant or el/e/phant or e/le/phant.

↓

Blend the letter sounds in the first chunk – e/ or el/ or e/

↓

Say the chunk

↓

Blend the letter sounds in the second chunk – leph/ or e/ or le/

↓

Say the chunk

↓

Blend the first and the second chunk – eleph/ or ele/ or ele/

↓

Blend the letter sounds in the third chunk – ant/ or phant/

↓

Say the chunk

↓

Blend the first, second, and third chunks – e/leph/ant or el/e/phant or e/le/phant

↓

Say the word - elephant

Phonics – Segmenting

- *Explanation*

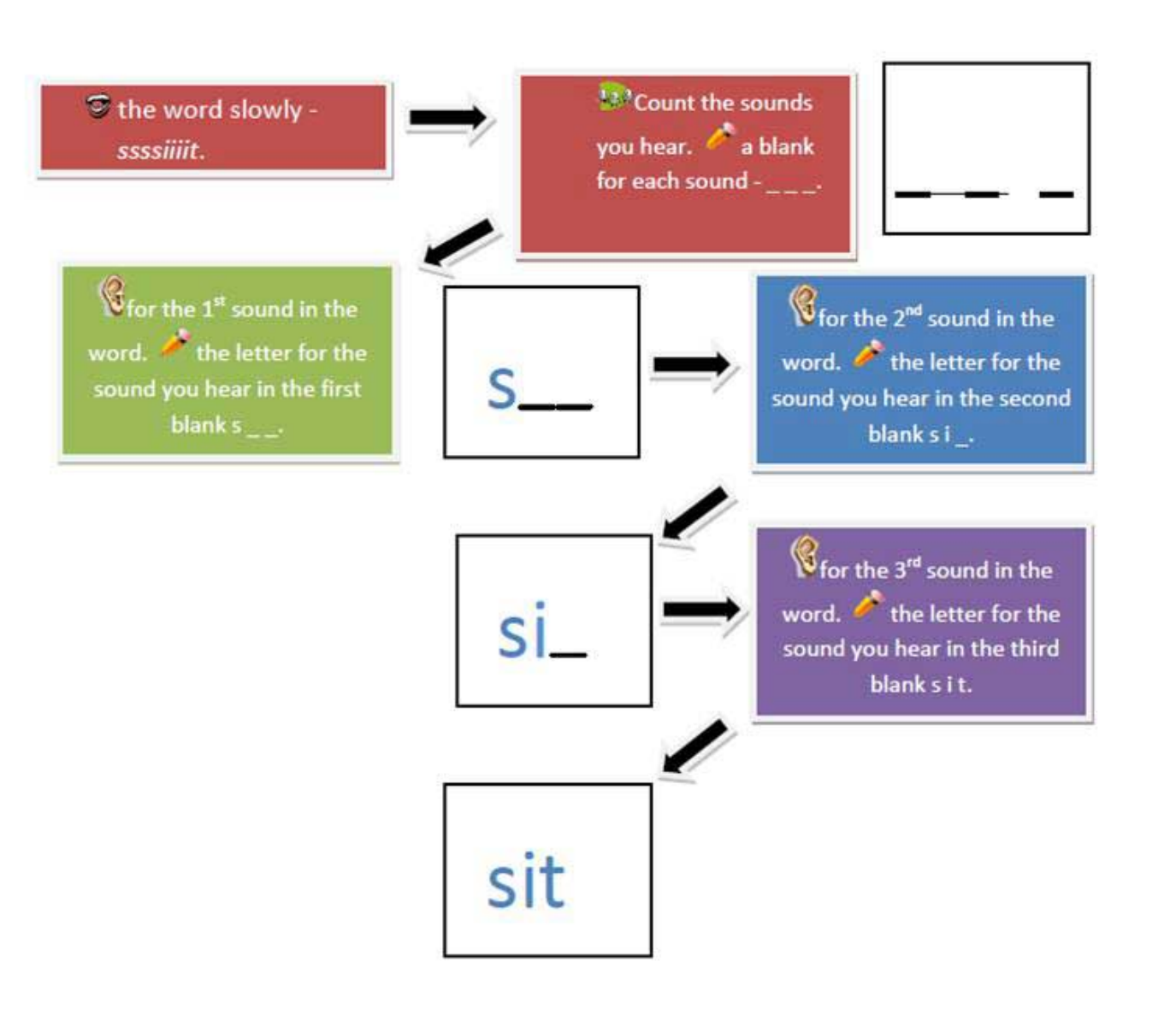
Today we will be learning how to segment words into sounds to spell words. Segmenting the sounds in spoken words to write words is a very important part of learning how to spell unfamiliar words. Segmenting spoken words to spell is one the important things you will learn in kindergarten and first grade to help you be able to write about many other things you will learn in school and in life.

Phonics – Segmenting

- ***Modeling***

I will model for you how to segment the sounds in spoken words to spell words. Listen to the word as I say it - *sit. (Say the word, sit)*. I want to segment the sounds in this word to spell the word. To segment the sounds in this word, I stretch the word out or say it very slowly like this – *ssssssss-iiiiiiii-t*. Next, I count how many sounds I hear and make a blank on my paper for each sound I hear in the word – *sit. (Write three blanks on the board* _ _ _). I stretch the word to hear the first sound – *ssssss* and I think to myself, this is the sound that goes with the letter *s*. So, I write an *s* in the first blank *s*_ _. Next, I listen to the second sound in the word – *sit*. I stretch the word again – *ssssss-iiiii*. I stretch the word to hear the second sound – *iiiii* and I think to myself, this is the sound that goes with the letter *i*. So, I write an *i* in the second blank *s i* _. Finally, I listen to the third sound in the word – *sit*. I stretch the word again – *ssssss-iiiii-t*. I stretch the word to hear the third sound – */t/* and I think to myself, this is the sound that goes with the letter *t*. So, I write a *t* in the third blank *s i t*. This is how I segment sounds in words to write words I don't know how to spell.

Phonics – Segmenting



Phonics – Multi-Syllabic Segmenting

- *Explanation*

Today we will be learning how to segment words into sounds to spell words. Segmenting words to write big words is a very important part of learning how to write. Writing and spelling are important things you will learn in school to help you write about the things that you will learn in school and life.

Phonics – Multi-Syllabic Segmenting

- ***Modeling***

I will model for you how to segment a word to spell big words. Here is a word, *macaroni*. I want to segment the word to spell this big word. To segment the parts of this word, I stretch the word into pronounceable units or syllables – *mac a ro ni*. I hear four syllables or pronunciation units. The first syllable or pronunciation unit I hear is *mac*. I stretch this syllable out slowly, *mmmmaaaa/k/*. I hear three sounds so I write three blanks for the first syllable. Next I listen for the first sound, *mmm*. I think about this sounds and write the letter that I know represents this sound – m. Next, I listen for the second sound in the syllable – *mac*. I hear the second sound – *aaaaa*. I write the second sound's letter – a. I listen to the third sound in the syllable – *mac*. I hear write the letter – k. In the second syllable I hear the sound of /uh/ and write the letter a. In the third syllable I hear two sounds – *rrrrrooooo*. I write down two more blanks and write the letter I hear with the first sound in this syllable – r. Then I listen for the second sound and write the letter for the sound I hear – o. Finally, I stretch the last syllable of the word – *nnnnniiiii*. I write two blanks after stretching the sounds in this syllable. The first sound is *nnnn*, so I write the letter n. The final sound is */e/* so I write the letter e. Now I have the spelling of *makarone*. I look at this spelling to see if it looks like the word as I have seen it. If not, I check it using a dictionary or spell check. (Model this process of checking in a dictionary or spell check).

Phonics – Multi-Syllabic Segmenting

Say the word slowly by stretching it out and listen for and count the number of syllables in the word – *complete*

↓

Write down big blanks for the number of syllables - ____ ____- *complete*.

↓

Segment the first syllable into sounds by saying and stretching the syllable slowly – *cccc/uh/mmm*.

↓

Write three blanks for the first syllable

↓

Listen for the first sound in the syllable and write the letter – c or k.

↓

Listen for the next sound in the syllable and write the letter - /uh/ - a, o, or u.

↓

Listen for the next sound in the syllable and write the letter – *mmmm* - m.

↓

Segment the second syllable into sounds by saying and stretching the syllable slowly – *plete*.

↓

Write four blanks for the second syllable

↓

Listen for the first sound in the syllable and write the letter – p.

↓

Listen for the next sound in the syllable and write the letter - l.

↓

Listen for the next sound in the syllable and write the letter - e.

↓

Listen for the last sound in the syllable and write the letter – t.

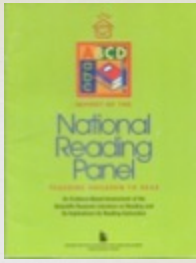
↓

Check the spelling – *complet* or *komplet* using a dictionary or spell check

The Science of Early Reading Instruction (K-3)

Fluency

Fluency



Fluency "Research-Validated" Practices in the *National Reading Panel* Report

- Focused on answering two questions: 1) guided oral repeated reading; 2) independent reading (encouraging more reading on their own).
- 77 studies analyzed showed that guided, oral, repeated reading is effective in promoting reading fluency (Effect Size = .41 SD).
- Only 14 studies located on SSR, DEAR, or independent reading, mostly of poor quality, AND short duration. Only 3 found differences and these differences weren't large enough to be considered educationally significant.

What Do We Mean by Fluency?

Define explicitly the "characteristics" of fluent reading for students.

- **Fluent readers read what is on the page with few errors.**
- **Fluent readers vary the speed of their reading considering the difficulty of the text and their purpose reading.**
- **Fluent readers read with appropriate volume, expression, phrasing, and smoothness.**
- **Fluent readers can retell what they've read.**

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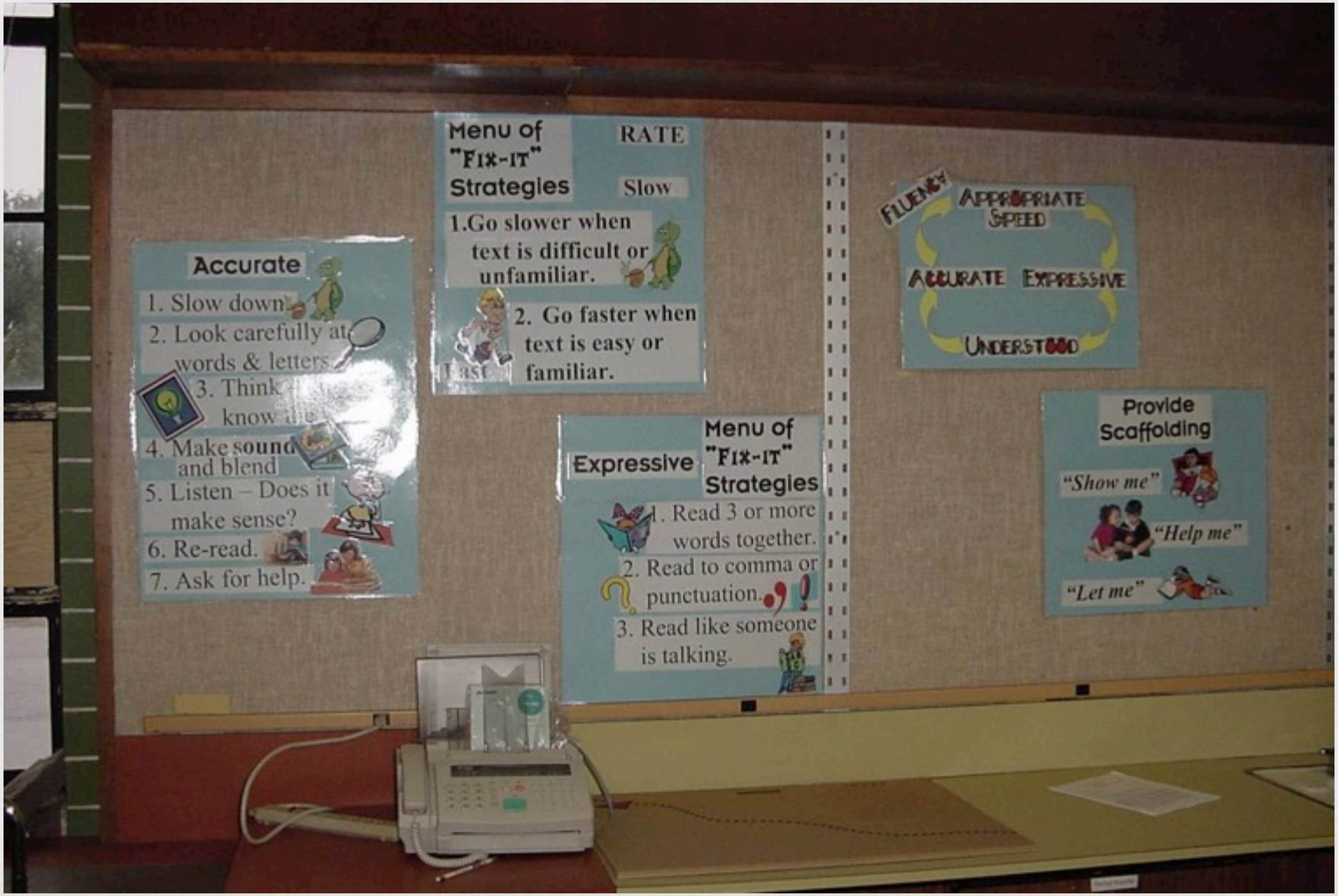


Fluency Curriculum

Kindergarten

- Letter Names
- Letter Sounds
- 25 Sight Words
- CVC Blending
- CVC Segmenting

Fluency Curriculum

First-Grade- 1st Half of Year

- Letter Names
- Letter Sounds
- 107 Sight Words
- CVC, CVCe vowel digraphs, diphthongs, consonant blends, digraphs, r controlled, and chunks (rimes) Blending
- CVC, CVCe, vowel digraphs, diphthongs, consonant blends, digraphs, r controlled, and chunks (rimes) Segmenting

Fluency Curriculum

First-Grade- 2nd Half of Year and Beyond

- Accuracy
- Appropriate Speed
  - Too Fast
  - Too Slow
  - Just Right
- Expression
  - Phrasing
  - Volume
  - Inflection
- Comprehension

Fluency

- **Fluency** is a 50/50 deal in the early stages of reading acquisition!
  - 50% sight word recognition
  - 50% using phonics to decode words.

Sight Word Recognition

- 107 words make up over 50% of the words you read!
- 930 words make up 65% of the words you read!
- 5,000 words make up 80% of the words you read?
- 13% of words occur only once in one million words

Zeno, S. M., Ivens, S. H., Millard, R.T., & Duvvuri, R. (1995). *The educator's word guide.* New York: Touchstone Applied Science Associates, Inc.

Hiebert, E. H. (2004). *Texts for Fluency and Vocabulary: Selecting Instructional Texts that Support Reading Fluency*

Sight Word Recognition

Which sight words should I teach in Kindergarten?

The Lorge-Thorndike Magazine Count

	Word	Frequency of Use	Cumulative % of Use
1	the	236,472	.0515
2	and	138,672	.0817
3	a	117,222	.1072
4	to	115,358	.1323
5	of	112,601	.1568
6	I	89,489	.1763
7	in	75,253	.1926
8	was	58,732	.2055
9	that	55,667	.2176
10	it	52,107	.2290
11	he	49,268	.2397
12	you	42,581	.2490
13	for	39,363	.2576
14	had	34,341	.2651
15	is	33,404	.2723
16	with	32,903	.2795
17	her	31,824	.2884
18	she	31,087	.2932
19	his	30,748	.2999
20	as	30,693	.3066
21	on	30,244	.3132
22	at	26,250	.3189
23	have	24,456	.3242
24	but	23,704	.3292
25	me	23,364	.3345

Sum=1,535,783

Total Number of Words= 4,591,125

Sight Word Recognition

Which sight words should I teach in beyond Kindergarten?

Zeno List of 107 Most Highly Frequent Words

the	not	people	most	know
of	have	them	its	little
and	this	other	made	such
to	but	more	over	even
a	by	will	see	much
in	were	into	first	our
is	one	your	new	must
that	all	which	very	
it	she	do	my	
was	when	then	also	
for	an	many	down	
you	their	these	make	
he	there	no	now	
on	her	time	way	
as	can	been	each	
are	we	who	called	
they	what	like	did	
with	about	could	just	
be	up	has	after	
his	said	him	water	
at	out	how	through	
or	if	than	get	
from	some	two	because	
had	would	may	back	
I	so	only	where	

Sight Word Recognition

The HIGH FREQUENCY SIGHT WORD Strategy

See the word.

Say the word.

Spell the word.

Cover the word.

Sight Word Recognition

Uncover the word and check it!


Look at the word again.


Spell the word again.


Cover the word.


Write the word.

Uncover the word and check it!

Sight Word Recognition

Pass out a card with the word printed on it.

 Cut the word into letters.

 Scramble the letters.

 Spell the word.

Do this 3 times.

Word Recognition

Find the word in on a paper or in a book.

Highlight it or color it.

Dictation: Students write the word and show it.

3 Do this 3 times.

Based on: Horn, E. (1957). Phonetics and spelling. *Elementary School Journal (57)*, 424-432.
Cunningham, P. M. (1980). Teaching were, with, what and other "four-letter" words. *The Reading Teacher, 34(2)*, 160-163.

Explicit Fluency Instruction

- **Explicit Instruction**
  - **Explain**
  - **Model**
  - **Practice**
    - **Oral Repeated:** *Read same text aloud multiple times over several days*
    - **Oral Wide:** *Read new text aloud each day*
    - **Silent Wide:** *Read a new text silently each day*
  - **Assess**

Explicit Fluency Instruction

What should you watch for in explicit fluency instruction?

- Instruction is based on assessment data of student need.
- Instruction should be focused on an objective.
- It should be designed around essential components of explicit instruction.
- The teacher should provide a clear process model for the students.
- Student learning should be guided with corrective feedback from the teacher.
- A variety of instructional grouping should be used.
- All students should be actively engaged for a large amount of time in the lesson.
- Lesson pacing should be brisk.
- Transitions should be kept to less than one minute.

Fluency Strategies

Oral Repeated Practice

- Choral Reading
  - Unison
  - Echo
  - Rounds
  - Antiphonal

Fluency Strategies

Choral Reading

You Need to Have an Iron Rear

by

Jack Prelutsky

You need to have an iron rear
To sit upon a cactus,
Or otherwise, at least a year
Of very painful practice.

Prelutsky, J. (1984). The New Kid on the Block. NY: Greenwillow, p. 15.

Fluency Strategies

Choral Reading

I'm looking under a pile of lumber
Where I must have lost my gum
First it was Dentyne and then it was cloves
Then it was spearmint, nine days old
No use explaining, the one remaining
Was my dear old bubble gum
I'm looking under a pile of lumber
Where I must have lost my gum

From Pankake, J. & M. (1988). A Prairie Home Companion Folk Song Book. NY: Viking Press.

Fluency Strategies

Oral Repeated Practice

- Readers' Theater
- Radio Reading

Fluency Strategies

- Oral Repeated Practice
- Assisted Reading
  - Neurological Impress
  - Captioned T.V.
  - Computer Programs
  - Partner Reading

Fluency Strategies

Neurological Impress

- The neurological impress method (NIM) involves the student and the teacher in reading the same text aloud simultaneously (Heckleman, 1966, 1969; Hollingsworth, 1970, 1978).
- To use the NIM, the student sits slightly in front and to one side of the teacher as they hold the text. The teacher moves her finger beneath the words as they are spoken in near-unison fashion. Both try to maintain a comfortably brisk, continuous rate of oral reading. The teacher's role is to keep the pace when the student starts to slow down. Pausing for analyzing unknown words is not permitted. The teacher's voice is directed at the student's ear so that the words are seen, heard, and said simultaneously.

Fluency Strategies

Captioned TV

- Several researchers have found that closed-caption television to be an effective tool to improve fluency and comprehension (Koskinen, Wilson, & Jensema, 1985; Neuman & Koskinen, 1992).
- First, watch a part of the captioned TV program together as a group (5–10 minutes). Stop the recorded tape and ask students to predict what will happen next in the program. Then, continue showing the program so that students can check their predictions. After watching a closed-caption TV program, students can practice reading aloud along with the captions. If necessary, both the auditory portion and the closed captioning can be played simultaneously to provide students with fluency problems support through their initial attempts to read. At some later point, students can be allowed to practice reading the captioning without the auditory portion of the program. Koskinen et al. (1985) added that they "do not recommend that the sound be turned off if this, in effect, turns off the children.

Fluency Strategies

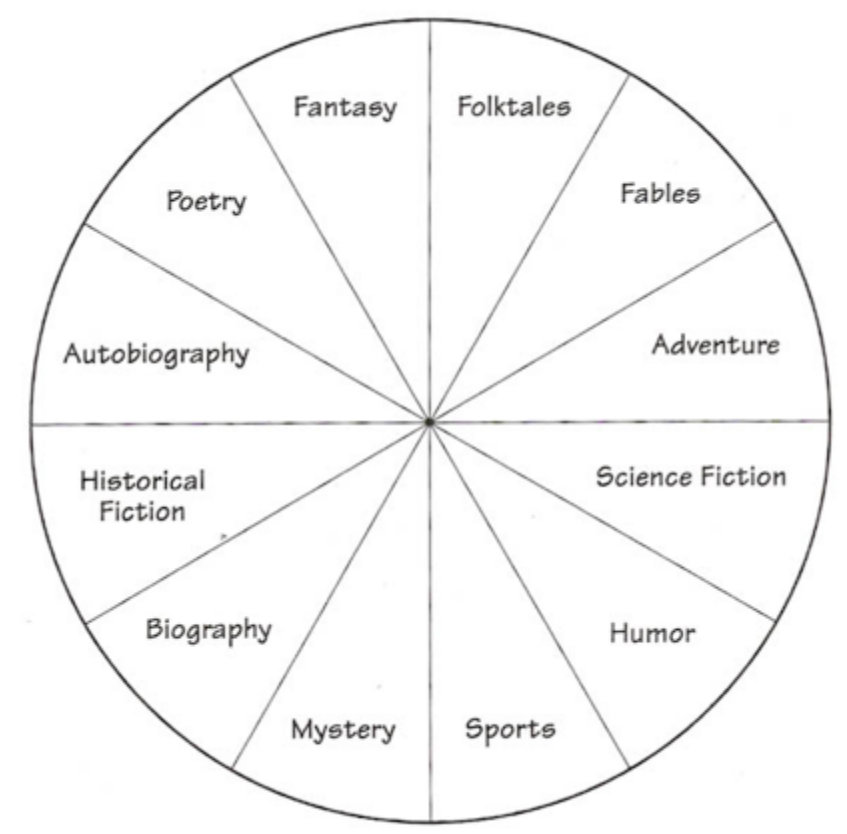
Partner Reading

- Social Selection
- Not too widely separated in ability
- Procedures taught and practiced
- Procedures posted on book box
- Books in a container for each pair
- Seated shoulder to shoulder
- Consider fluency phones

Fluency Strategies

Oral Wide Reading Practice

- Genre Wheel



Fluency Strategies

Silent Reading

- R^5 Transforming SSR
- ScSR

Fluency Strategies

R^5: The Make Over that Trans-formed SSR

TABLE 1
Comparing R^5, reading workshop, and SSR

R^5	Reading Workshop	SSR
Read and relax: Students have a set purpose to read a book of their choice anywhere in the classroom. Students practice strategy use. Teacher does a "status of the class" and then confers with students on their strategy plans.	Minilesson: Teacher conducts a quick minilesson, which may set a purpose for reading, usually in a reading area.	Read: Teacher and students read a book of their choice.
Reflect and respond: Students reflect and respond in their reading log, recording the book title and genre, as well as identifying the strategy they used and something interesting they read. Teacher circulates during this time.	Read: Students read a book of their choice. Teacher reads, does a "status of the class" or circulates the room, and confers with students who have signed up for a conference.	Record: Students record their book titles in a reading record.
Rap (Share/discuss): *In pairs* Teacher continues to circulate. Students pair up. They share something interesting from their book (this may or may not be what they recorded) and actively listen to their partner as he or she shares. *Whole class* Teacher facilitates sharing. Students report what their partner shared. Teacher asks the class to identify the strategy being used. Then, their partner shares what they discussed. The teacher elicits the strategy and the process is repeated with a new pair.	Record/respond: Students record their book titles in a reading log and then respond to the book they are reading. Sharing: Teacher facilitates a whole-class share of reading.	Sharing: Students may or may not share what they have read.

Note. Atwell (1998), Pilgreen (2000), and Routman (2003)

MICHELLE KELLEY
NICKI CLAUSEN-GRACE

R^5: The Sustained Silent Reading makeover that transformed readers

The Reading Teacher Vol. 60, No. 2 October 2006

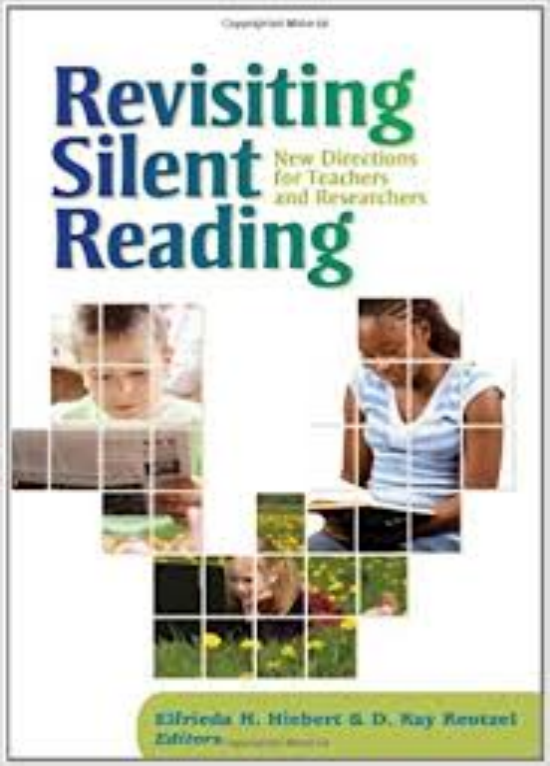
Why didn't SSR work very well as a way to practice reading effectively for fluency?

- The implementation of traditional SSR in elementary classrooms has been roundly criticized for teachers failing to *teach, monitor, interact with,* and *hold students accountable* for their time spent in reading practice.

What is Scaffolded Silent Reading (ScSR)?

- **Scaffolded Silent Reading** (ScSR) is silent reading practice that redesigns practice conditions to deal affirmatively with past concerns and criticisms surrounding traditionally implemented **Silent Sustained Reading** (SSR).

What is Scaffolded Silent Reading (ScSR)?



Scaffolded Silent Reading: A Complement to Guided Repeated Oral Reading That Works!

D. Ray Reutzel, Cindy D. Jones, Parker C. Fawson, John A. Smith

Scaffolded Silent Reading provides third-grade teachers an alternative for practicing reading that decreases errors and increases students' reading rates and comprehension.

Mrs. Tavenki (all names used are pseudonyms) had used Sustained Silent Reading or SSR with her third-grade students as a regular part of a daily reading instructional routine for many years. She and other teachers at Green Valley Elementary School firmly believed that students need daily reading practice to become successful, motivated readers.

The school principal, Mrs. Clapton, informed teachers that because the National Reading Panel (NRP; National Institute of Child Health and Human Development [NICHD], 2000) had not found sufficient evidence to support the continued use of SSR, teachers were to stop using SSR and instead have students practice reading by using guided oral repeated readings with feedback. Mrs. Tavenki complied with the instructions she was given by her school principal but harbored concerns about when and how her students would be helped to convert their oral reading skills to silent reading, especially in the third grade where many of her students were more than ready to read silently rather than orally.

Mrs. Tavenki and other concerned colleagues informally spoke with a university literacy researcher and teacher educator they knew well and trusted. Together the group began a journey that led to a redesign of traditionally implemented SSR called Scaffolded Silent Reading (ScSR).

Perhaps no other single conclusion drawn by the NRP (NICHD, 2000) has sparked more controversy than the lack of research support for time spent reading and the related, prevalent classroom practice of SSR (Allington, 2002; Coles, 2000; Cunningham, 2001; Edmondson & Shannon, 2002; Krashen, 2002). Traditionally, SSR had been incorporated into the daily reading instructional routines of practically every classroom and school across the United States. Not only was SSR popular with many teachers, but also it was popular with some students (Baumann, Hoffman, Duffy-Hester, & Moon, 2000; Baumann, Hoffman, Moon, & Duffy-Hester, 1998; Manning & Manning, 1984; McCracken, 1971; Pressley, Yokoi, & Rankin, 2000; Robertson, Keating, Shenton, & Roberts, 1996).

Although many correlation studies demonstrate a relationship between encouraging students to read independently and reading achievement (Anderson, Wilson, & Fielding, 1988; NICHD, 2000), the NRP (NICHD, 2000) examined only experimental and quasi-experimental studies of the effects of independent reading on reading achievement and found only 10 such studies. Only 1 of the 10 SSR studies in the NRP analysis involved primary-grade students (Collins, 1980). The remaining 9 SSR studies were focused on the use of SSR in intermediate-elementary grades or in secondary school settings. Five studies reported no statistically significant effect for SSR on students' reading achievement. Five studies found effects favoring SSR, but magnitude-of-effect estimates were of a "noneducationally" significant size or the results were mixed in terms of effects on outcome as-

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The Reading Teacher, 67(3), pp. 194–207
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- http://textproject.org/assets/library/resources/Hiebert-Reutzel-2014-Revisiting-Silent-Reading.pd

COMPARING SSR AND SCSR

What is Scaffolded Silent Reading (ScSR)?

Key Characteristics	Traditionally Implemented Silent Sustained Reading (SSR)	Scaffolded Silent Reading (ScSR)
Teacher Instructional Role	Model for students silent reading of self selected books	Teach and scaffold students' appropriate book selection strategies
Classroom Library or Book Collection Design	Store and display books in variant ways across classroom contexts	Store and display a variety of genres within designated levels of reading difficulty
Characteristics of Reading Motivation/Engagement	Encourage student free choice of reading materials	Circumscribe student choice to encourage wide reading using a genre selection wheel
Level of Text Difficulty	Allow students to freely choose the level of difficulty of reading materials	Students are assigned by the teacher to read texts at their independent reading levels
Goal of Reading Practice	Fostering students' motivation to read	Foster students' motivation to read AND reading comprehension and fluency development
Teacher Monitoring and Feedback	None	Brief 5 minute teacher initiated individual student reading conferences
Student Accountability	None	Read aloud to the teacher, answer teacher questions, set personal goals for completing the reading of a book within a timeframe, and complete one or more book response projects

What is the evidence for ScSR?

- To determine the effectiveness of **ScSR**, we conducted a year long controlled experiment in which the effectiveness of **ScSR** was compared to the NRP's (2000) recommended form of reading practice – guided repeated oral reading with feedback (**GROR**).

What is the evidence for ScSR?

- Statistical comparisons using gain scores of students' pretest and post test passage mean scores for accuracy, rate, expression and comprehension confirmed no significant differences between the two groups (ScSR and GROR) on fluency or comprehension except for expression on one passage which favored the ScSR group.

The Science of Early Reading Instruction (K-3)

Comprehension

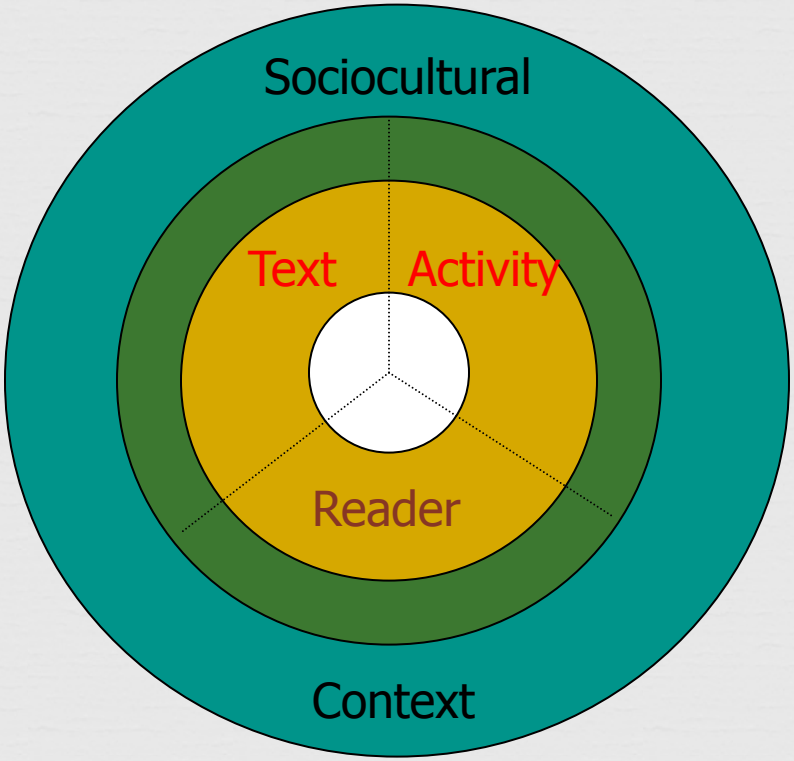
Rand Study Group (2002) Definition of Reading Comprehension

Reading comprehension is the process of simultaneously extracting and constructing meaning. Comprehension involves three elements:

1. **The <u>reader</u> who is doing the comprehension**
2. **The <u>text</u> that is to be comprehended**
3. **The <u>activity</u> in which comprehension is a part**

-*Sweet & Snow, 2003, pp. 2-3*

Elements of Reading Comprehension



Rand Study Group, Sweet & Snow, 2003, pp. 2-3

Teaching and Assessing Comprehension in Elementary Classrooms

There is nothing so practical as a good theory.

Kurt Lewin

Father of Modern Day Social Psychology

Teaching and Assessing Comprehension in Elementary Classrooms

"We need … research that examines the knowledge teachers need to engage in specific practices supportive of comprehension …"

Duke, Pearson, Strachan, & Billman (2011, p. 82)

Teaching and Assessing Comprehension in Elementary Classrooms

Teachers' Specialized Knowledge for Supporting Student Comprehension in Text-Based Discussions

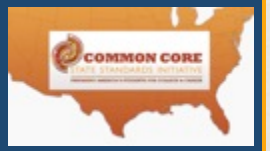
Linda Kucan – University of Pittsburgh
Susanna Hapgood – University of Toledo
Annemarie S. Palincsar – University of Michigan
The Elementary School Journal, 2011
University of Chicago Press

Teaching and Assessing Comprehension in Elementary Classrooms

CoLTS is a paper and pencil test that engages teachers in analyzing a text to identify the most important ideas, as well as those text features that might challenge readers' comprehension.

Teaching and Assessing Comprehension in Elementary Classrooms

"We found the majority of teachers in this study demonstrated very limited ability to analyze the texts in meaningful ways.
We connect this lack of expertise to a larger construct, namely, that the teachers were not working from a model [theory] of text comprehension that foregrounds the integration of text information and the possible obstacles to that integration."

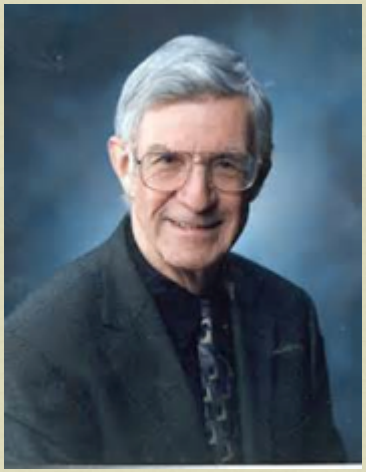


Teaching and Assessing Comprehension in Elementary Classrooms

Most teacher preparation programs, school district professional development workshops, and even federally sponsored teacher practice guides have emphasized the *what* and *how* of teaching reading comprehension rather than increasing a teacher's knowledge of text comprehension models or theories to be used as preparation for effective comprehension instruction in the age of the Common Core Standards.

What Has Been

COMPREHENSION INSTRUCTION BASED ON SCHEMA THEORY



(Anderson & Pearson, 1981)

Schema Theory Based Comprehension Instruction

Schema theory, in its time, was a quantum leap forward
from previous practices that emphasized the teaching of discrete reading comprehension skills.

Schema Theory Based Comprehension Instruction

Schema theory, and its subsequent research, has demonstrated quite convincingly that when students bring copious amounts of background knowledge about language, text and the world to the task of comprehending a text, they have a much easier time making sense of it (Pressley, 2001).

Schema Theory Based Comprehension Instruction

Schema theory emphasized the importance of the reader's background knowledge in the process of comprehending text. Schemas are represented as "packages" of knowledge stored in a reader's long-term memory
that can be enlisted to aid in the comprehension of text.

Schema Theory Based Comprehension Instruction

Schema Theory has led to an unintended neglect of text as an evidentiary base for supporting multiple levels of comprehension processing.

Introducing

A CONSTRUCTION-INTEGRATION [CI] MODEL OF TEXT COMPREHENSION

Dr. Walter Kintsch

Kintsch's (2013) CI Model of Text Comprehension

With the adoption of the *Common Core State Standards* (CCSS)
(NGA & CCSSO, 2010)
English Language Arts standards, the text, rather than the reader, has been positioned at the focal point of classroom comprehension instruction.

Kintsch's (2013) CI Model of Text Comprehension

With this change, the text is to be treated as a rich evidentiary base of knowledge about the world, language, and text's content and structure in the service of reading comprehension and knowledge acquisition.

Kintsch's (2013) CI Model of Text Comprehension

The CCSS speaking, listening, and reading standards have been designed and sequenced to fit a model of text comprehension that Schema Theory neither adequately describes nor explains how to enact a different focus for and organization of comprehension instruction than has been employed in the past (Duke, et al., 2011).

Kintsch's (2013) CI Model of Text Comprehension

When considering which model of text comprehension processing is invoked by the design and sequence of the CCSS reading standards, the *Construction-Integration Model of Text Comprehension* (CI Model) provides the most complete and fully developed explanation of text comprehension processes currently available (Duke, et al., 2011; Graesser, 2007; Wilkinson & Son, 2011).

Kintsch's (2013) CI Model of Text Comprehension

In addition, the CI Model mirrors the design and sequence of the CCSS anchor reading standards by describing text comprehension as a multi-leveled process

(Duke, et al., 2011, Graesser, 2007).

Kintsch's (2013) CI Model of Text Comprehension

So, how does the CI model work?

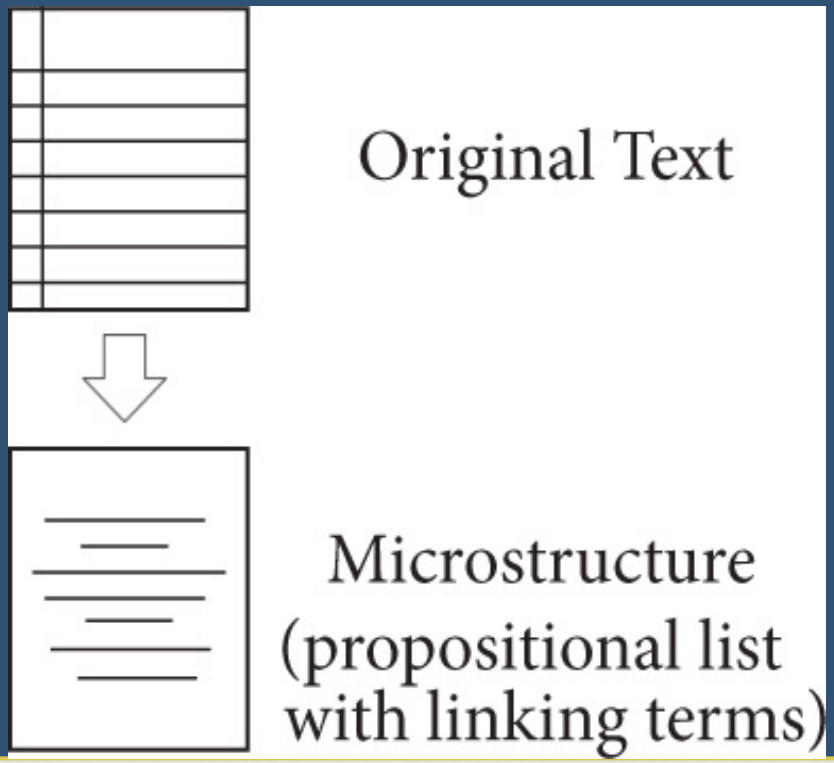
The CI model of text comprehension is composed of two major comprehension processes – CONSTRUCTION and INTEGRATION.

Caution

Construction Ahead

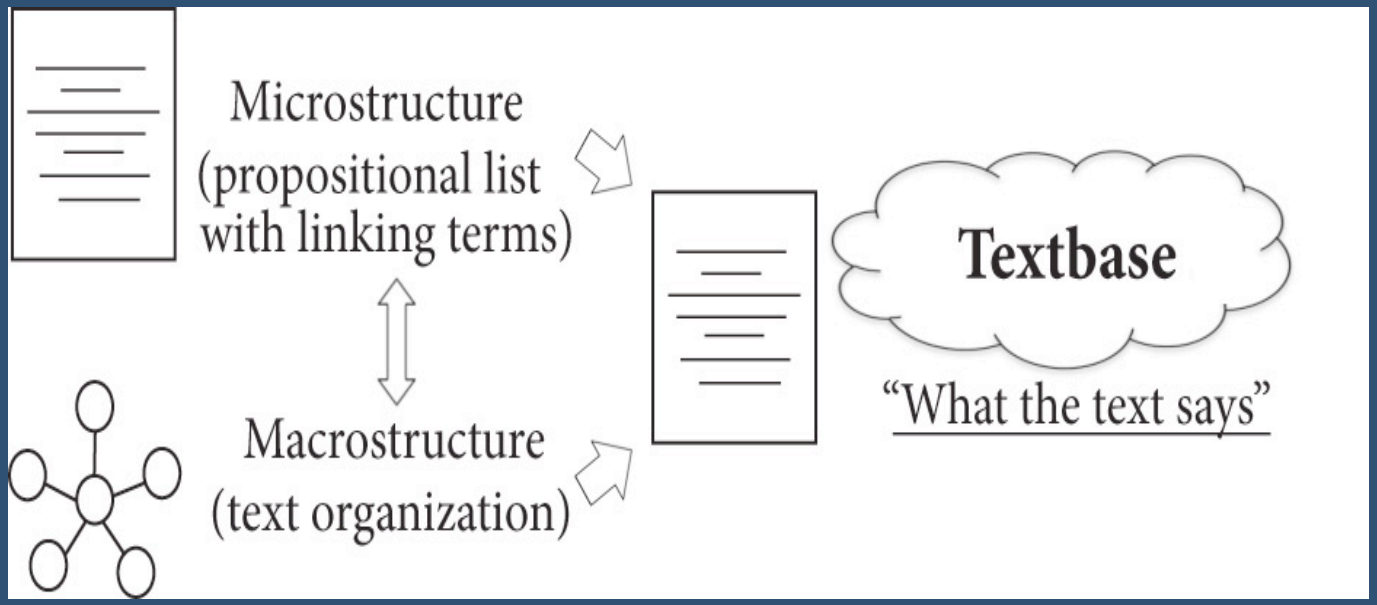
Kintsch's (2013) CI Model of Text Comprehension

CONSTRUCTING A MICRO TEXTBASE



Kintsch's (2013) Construction-Integration Model of Text Comprehension

CONSTRUCTING A MACRO TEXTBASE

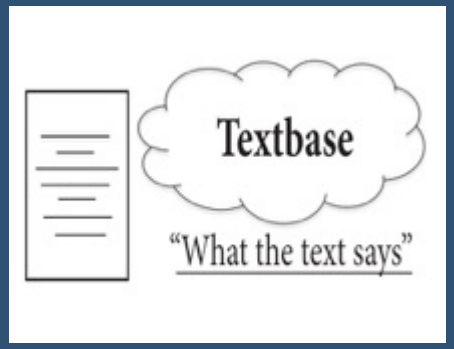


Integration Level 1

What's the situation here?

Kintsch's (2013) Construction-Integration Model of Text Comprehension

Integration: The Situation Model



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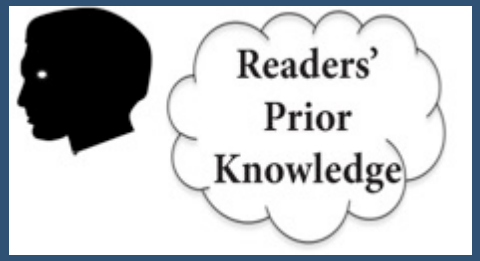

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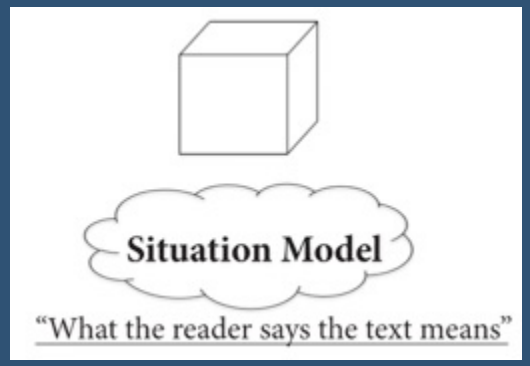
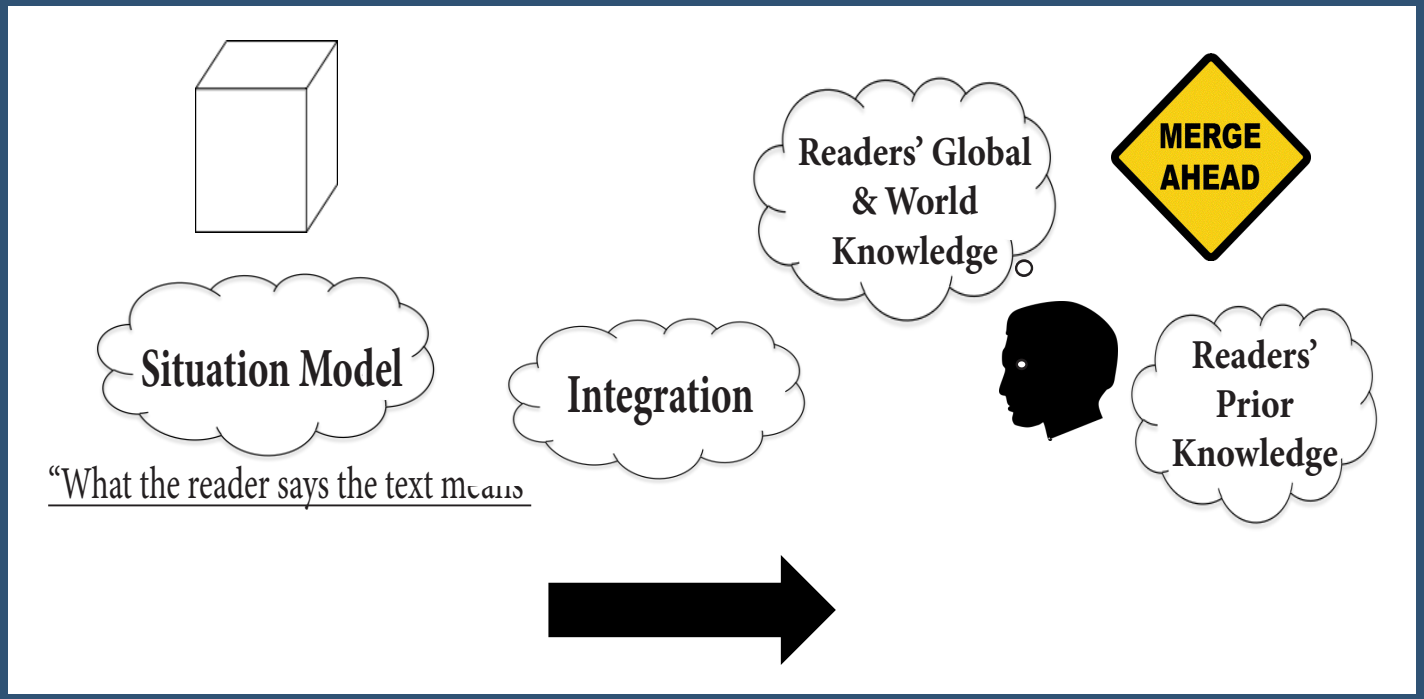


Integration Level 2

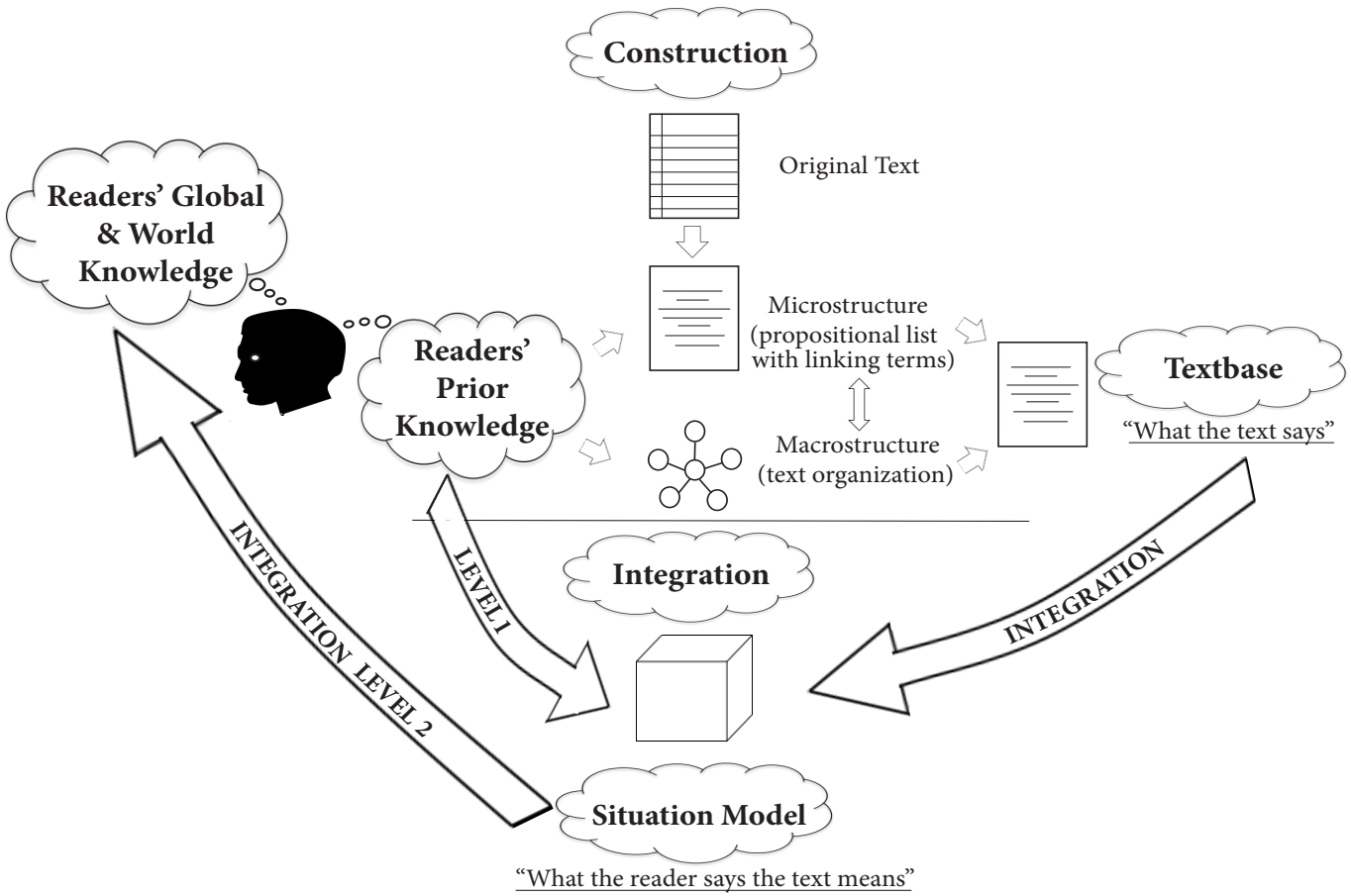
NEW KNOWLEDGE WITH OLD KNOWLEDGE

Kintsch's (2013) Construction-Integration Model of Text Comprehension

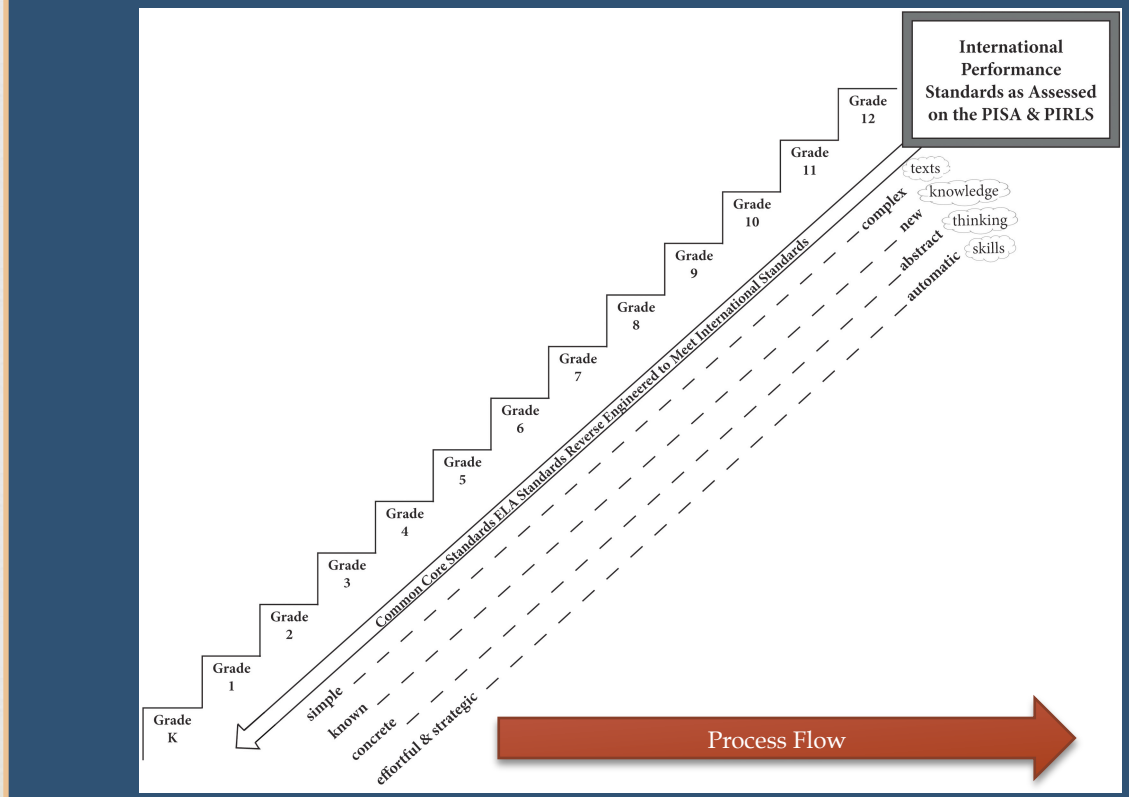
Integration: MERGING



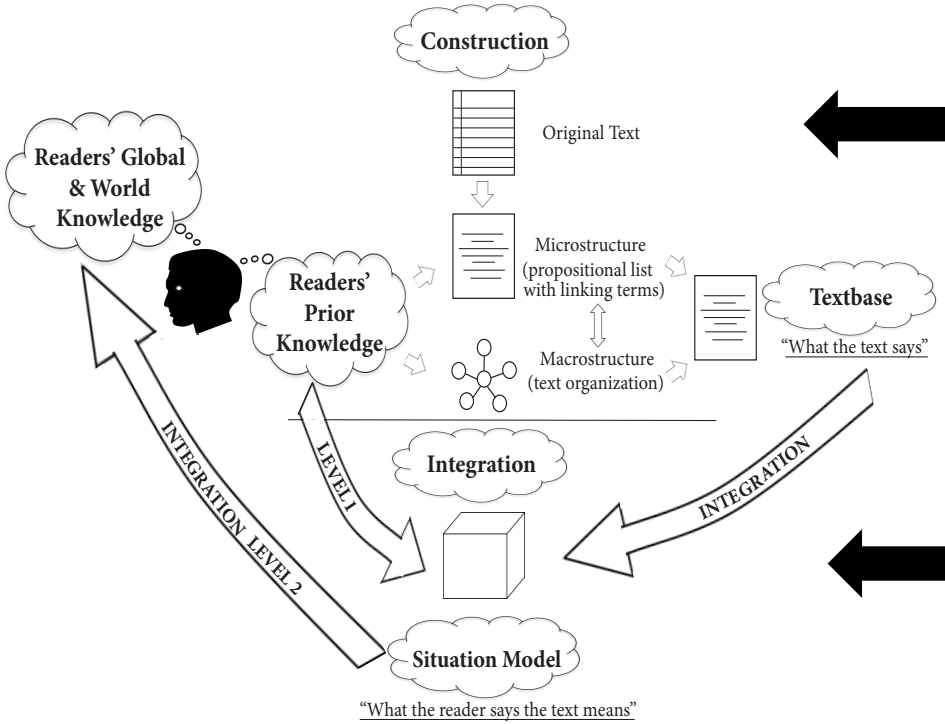
A Review of Construction-Integration (CI) Model of Text Comprehension



Comprehension Instruction in Elementary Common Core Classrooms



Comprehension Instruction in Elementary Common Core Classrooms



Reading Anchor Standards
- *Key Ideas and Details*
- *Craft and Structure*

Reading Anchor Standard
- *Integrating Knowledge and Ideas*

Process Flow

The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

Why Change from Schema Theory?: Four Advantages

- CI is more complete and comprehensive.
- CI positions text at the center of comprehension instruction.
- CI model represents comprehension as a multi-leveled process.
- CI invokes more sophisticated comprehension instruction to address these multiple levels of comprehension processes.

The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

What Will Changes Look Like?

Schema Theory Informed Comprehension Instruction: Lesson Events

- Selection of a book at the instructional level of text.
- Activation or building of background knowledge.
- Instruction of single strategy or a single set of multiple strategies.
- Establish a purpose for reading.
- Admonishments to use background knowledge and comprehension strategies during reading text.
- Single reading of a text.
- Teacher-led discussion, sometimes during, but more often after reading, using a series of schema and text-based questions to assess comprehension as a unitary process.

The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

What Will Changes Look Like? (Cont.)

CI Model Informed Comprehension Instruction: Lesson Events

- Select an appropriately challenging and complex literature or informational text.
- Support the CI Model's first level of text comprehension by selecting CCSS anchor standard 1, determining *key ideas and details*.
- Select a set of multiple comprehension strategies to be taught as tools to aid in the construction of the *microstructure* level of text.
- Students are reminded to use their background knowledge where it is helpful at this first level of comprehension processing.
- Support the CI Model's next level of text comprehension by selecting CCSS anchor standard 2, *craft and structure*.

The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

What Will Changes Look Like? (Cont.)

CI Model Informed Comprehension Instruction: Lesson Events

- Select another set of multiple comprehension strategies to be taught as tools to aid in the construction of the *macrostructure* level of text and the completion of the *textbase*.
- Remind students during the close reading to use their background knowledge where it is helpful.
- With teacher guidance, students "close read" the text again to address the next level of text comprehension – *macrostructure and textbase construction*.

The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

What Will Changes Look Like? (Cont.)

CI Model Informed Comprehension Instruction: Lesson Events

- **Support the CI Model's final level of text comprehension by selecting anchor standard 3 – *integration of knowledge and ideas.***
- **Select another set of comprehension strategies to help students create a *situation model* or an interpretation of what the text means.**
- **With guidance from the teacher, students take active steps to integrate the contents of their situation models into their world background knowledge network by selecting and using yet another set of multiple comprehension strategies such as summarizing, written responses, and presentations, etc.**

The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

Table 1. 1: A CI MODEL-BASED COMPREHENSION INSTRUCTIONAL FRAMEWORK FOR TEACHING THE CCSS READING STANDARDS

Construction Integration Model of Text Comprehension	CCSS Reading Standards	Instructional Decision Making (Evidence-Based Practices)
	10	**Select Text Genre and Complexity Level:** • Literature/Informational Text • Lexile Level
Construction	**Anchor Standards**	
Microstructure	• *Key Ideas and Details*	*Size of Text Unit Focus (Words, Phrases, Sentences)*
	Individual Reading Standards Selection	**Comprehension Strategy Set: Select Multiple Strategies**
	4	**Vocabulary Learning Strategies**
		• Tier 2 & 3 words
	3,5	**Establishing Local Text Coherence Strategies**
		• Cohesion Terms • Vertical Structuring of Phrases and Sentences • Sentence Combining • Paraphrasing
	1-5	**Cognitive Strategies**
		• Graphic Organizer • Monitoring • Fix Ups
	1, 2	**Discussion/Interaction Strategies**
		• Questioning • Retelling • Dramatization
	1-5	**Background Knowledge**
		• Activate • Build • Modify

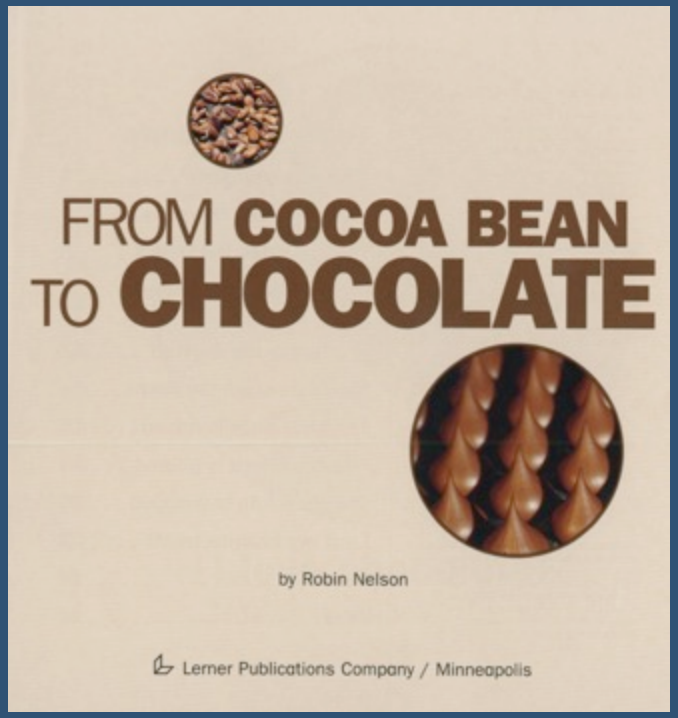
The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

Construction Integration Model of Text Comprehension	CCSS Reading Standards	Instructional Decision Making (Evidence-Based Practices)
Macrostructure	• *Craft and Structure*	*Size of Text Unit Focus (Paragraphs, Sections, Chapters, Whole Texts)*
	Individual Reading Standards Selection	**Comprehension Strategy Set: Select Multiple Strategies**
	5,6	**Establishing Global Text Coherence Strategies**
		• Literary Devices • Text Features • Text Structure
	5,6	**Cognitive Strategies**
		• Text Structure • Graphic Organizer • Summarization • Monitoring • Fix Ups
	5,6	**Discussion/Interaction Strategies**
		• Close Reading • Elaborative Interrogation • Questioning the Author
	5,6	**Background Knowledge** • Activate • Build • Modify

The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

Construction Integration Model of Text Comprehension	CCSS Reading Standards	Instructional Decision Making (Evidence-Based Practices)
Integration – Creating a Situation Model of Text	*Integration of Knowledge and Ideas*	*Size of Text Unit Focus (Whole Text)*
	Individual Reading Standards Selection	**Comprehension Strategy Set: Select Multiple Strategies**
	7-8	**Discussion/Interaction Strategies** • Close Reading • Questioning • Retelling • Dramatization
Integration – Linking the Situation Model with World Knowledge		*Size of Text Unit Focus (Multiple Texts)*
	9	**Cognitive Strategies** • Graphic Organizer • Text Structure • Summarization • Presentation/Reports • Written Responses • Visual Imagery/ Illustrations

The CI Text Comprehension Model: Making a Difference in Comprehension Instruction



The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

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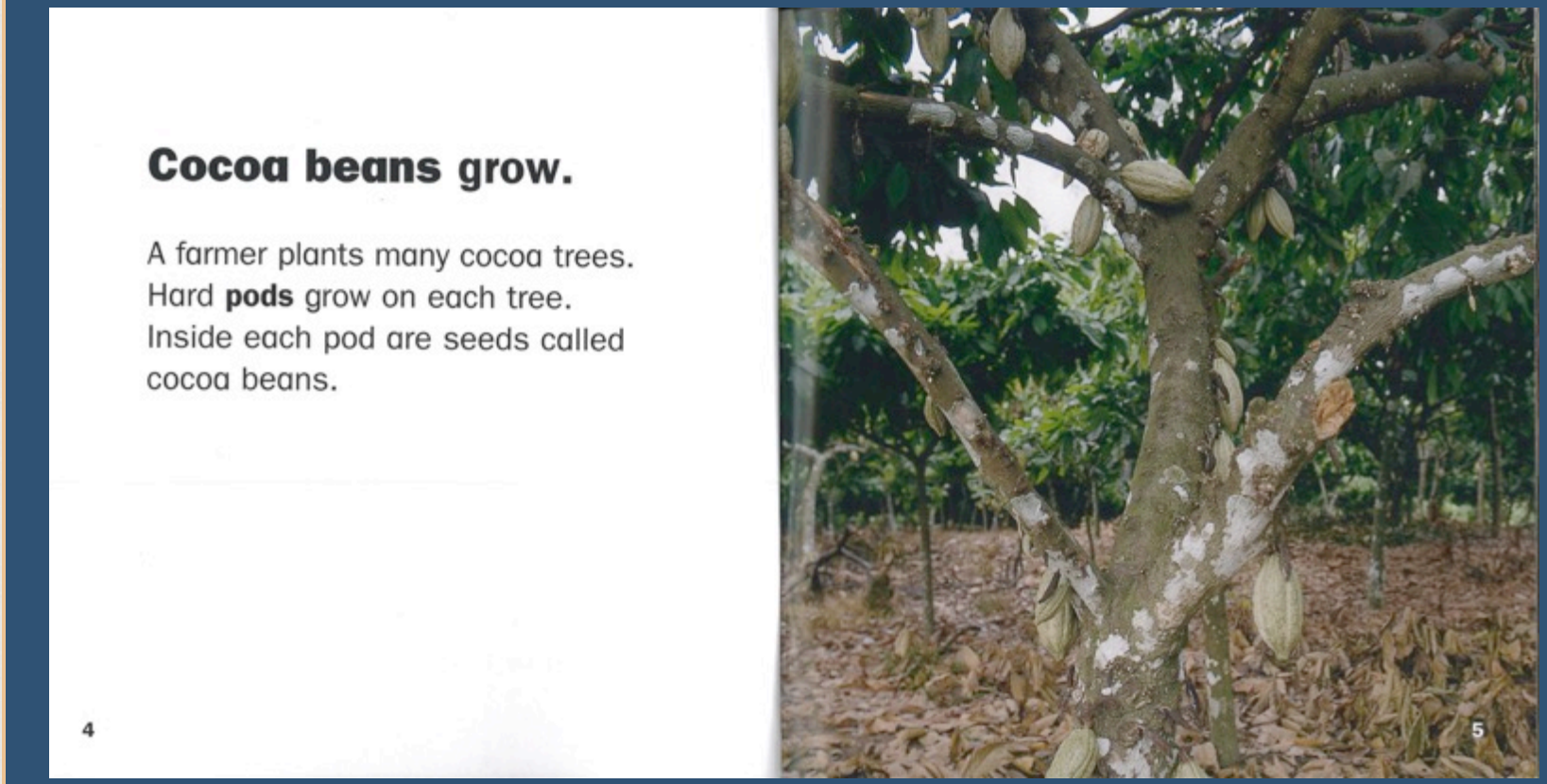
I love chocolate!

How is it made?

The CI Text Comprehension Model: Making a Difference in Comprehension Instruction



Cocoa beans grow.

A farmer plants many cocoa trees. Hard **pods** grow on each tree. Inside each pod are seeds called cocoa beans.

4

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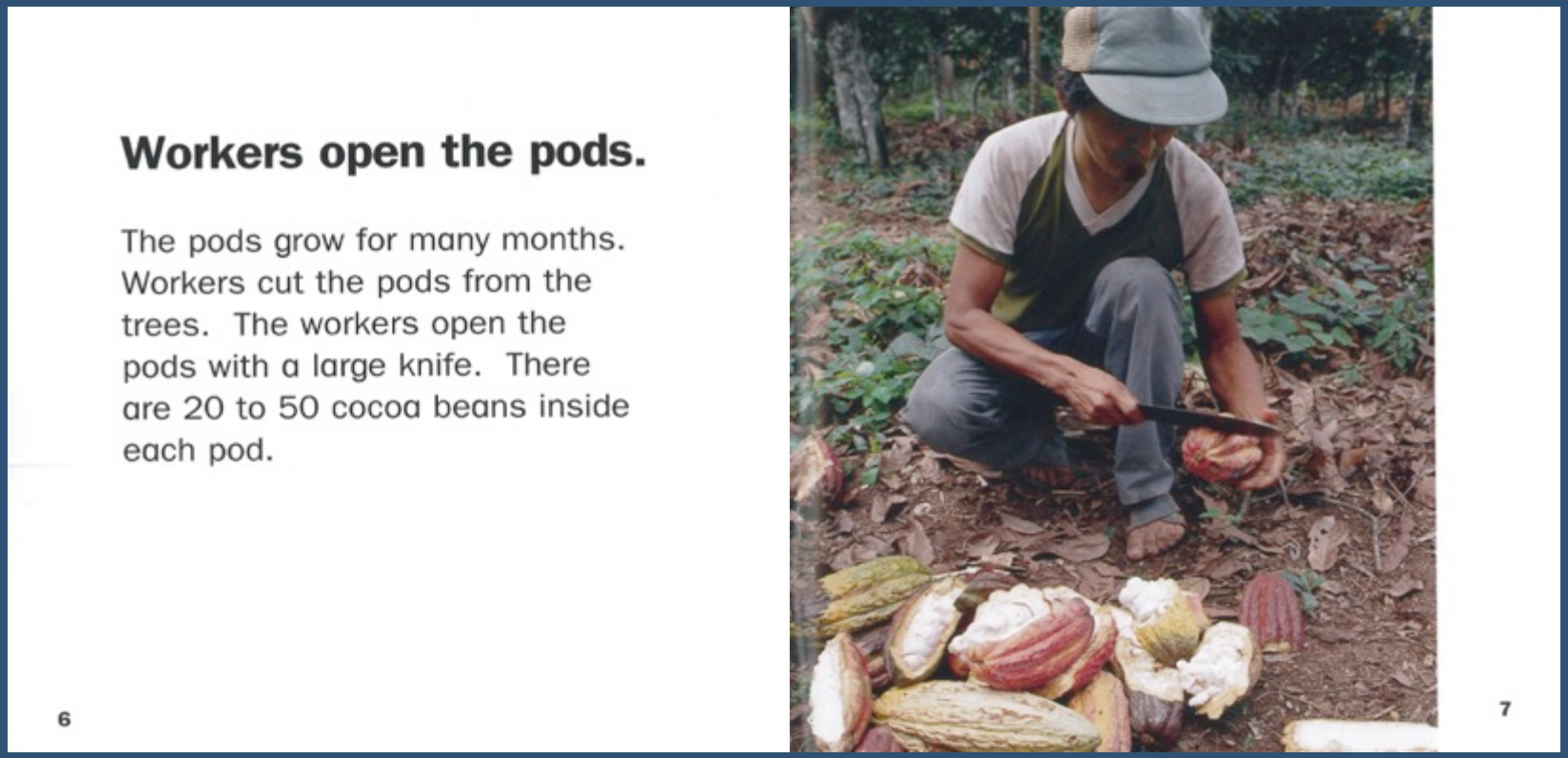
The CI Text Comprehension Model: Making a Difference in Comprehension Instruction



Workers open the pods.

The pods grow for many months. Workers cut the pods from the trees. The workers open the pods with a large knife. There are 20 to 50 cocoa beans inside each pod.

6

7

The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

The sun dries the beans.

The cocoa beans are taken out of the pods. Then they are left in the sun to dry for many days. The dry beans are put into large sacks.

8

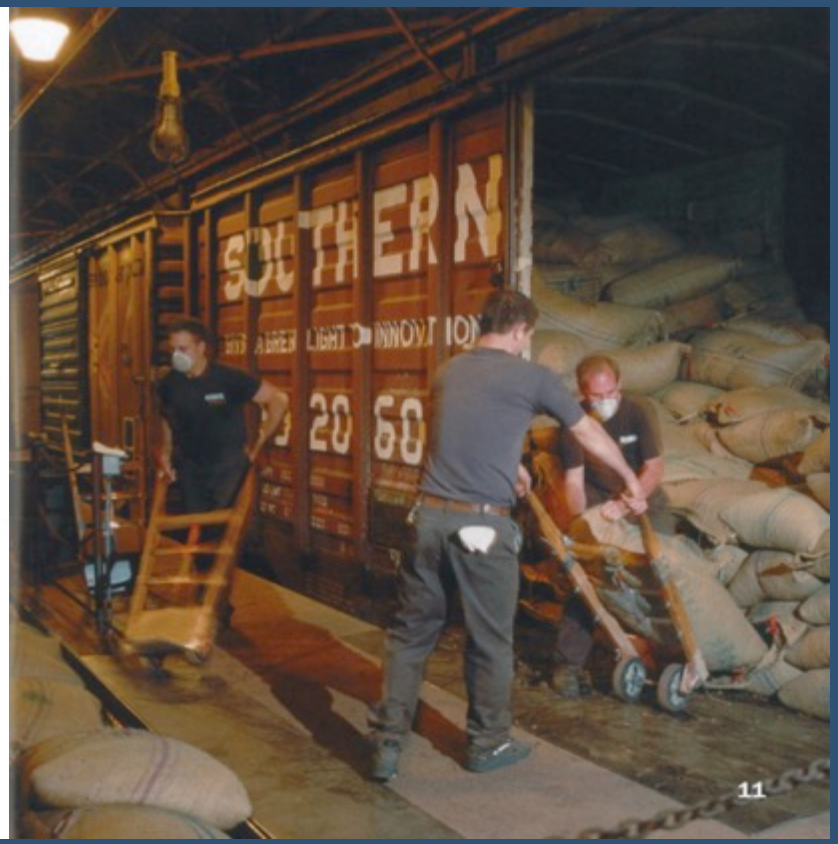
9

The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

A train takes the beans to a factory.

A train takes the sacks of cocoa beans to a chocolate factory.
A factory is a place where things are made.

10



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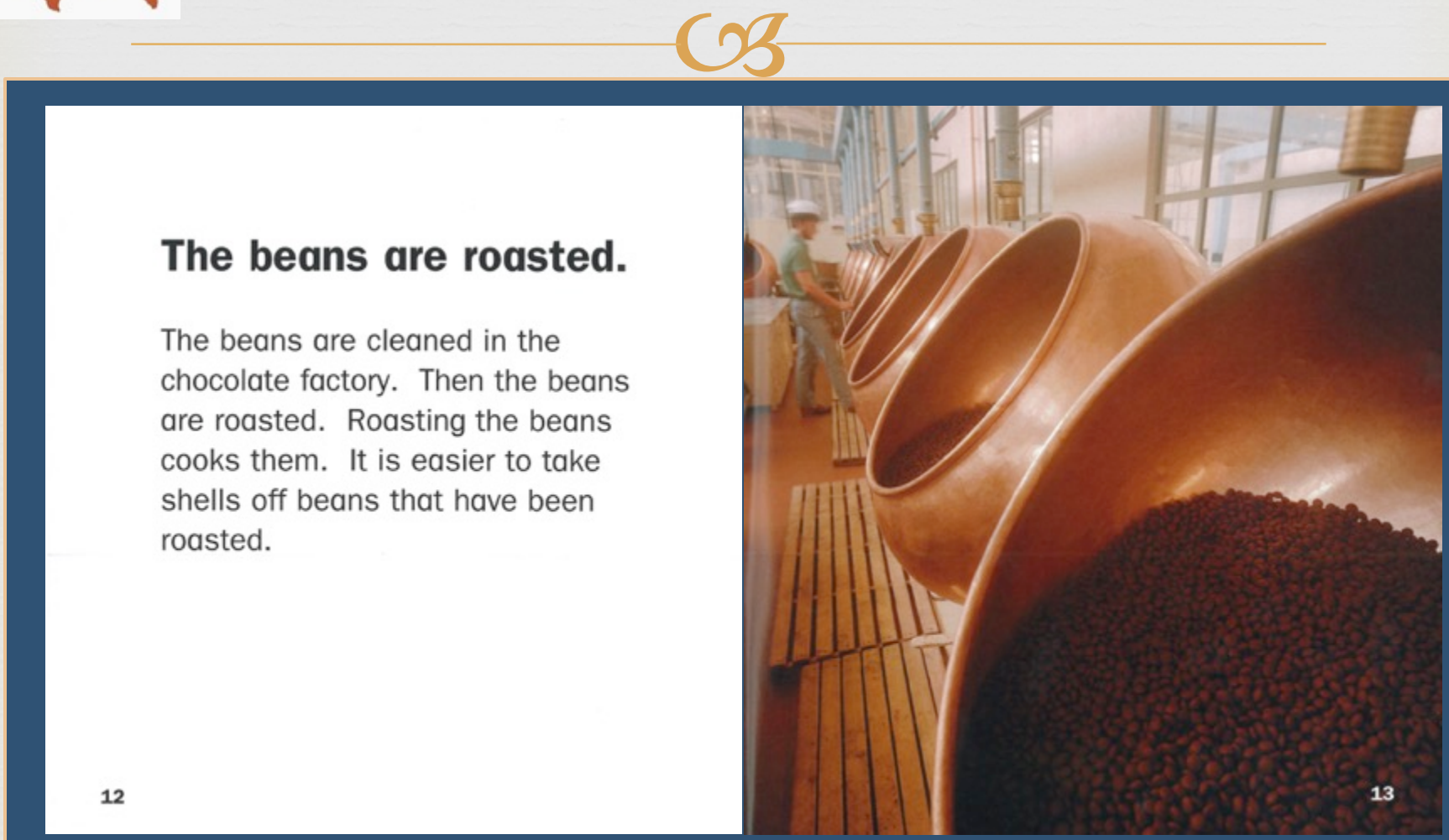
The CI Text Comprehension Model: Making a Difference in Comprehension Instruction



The beans are roasted.

The beans are cleaned in the chocolate factory. Then the beans are roasted. Roasting the beans cooks them. It is easier to take shells off beans that have been roasted.

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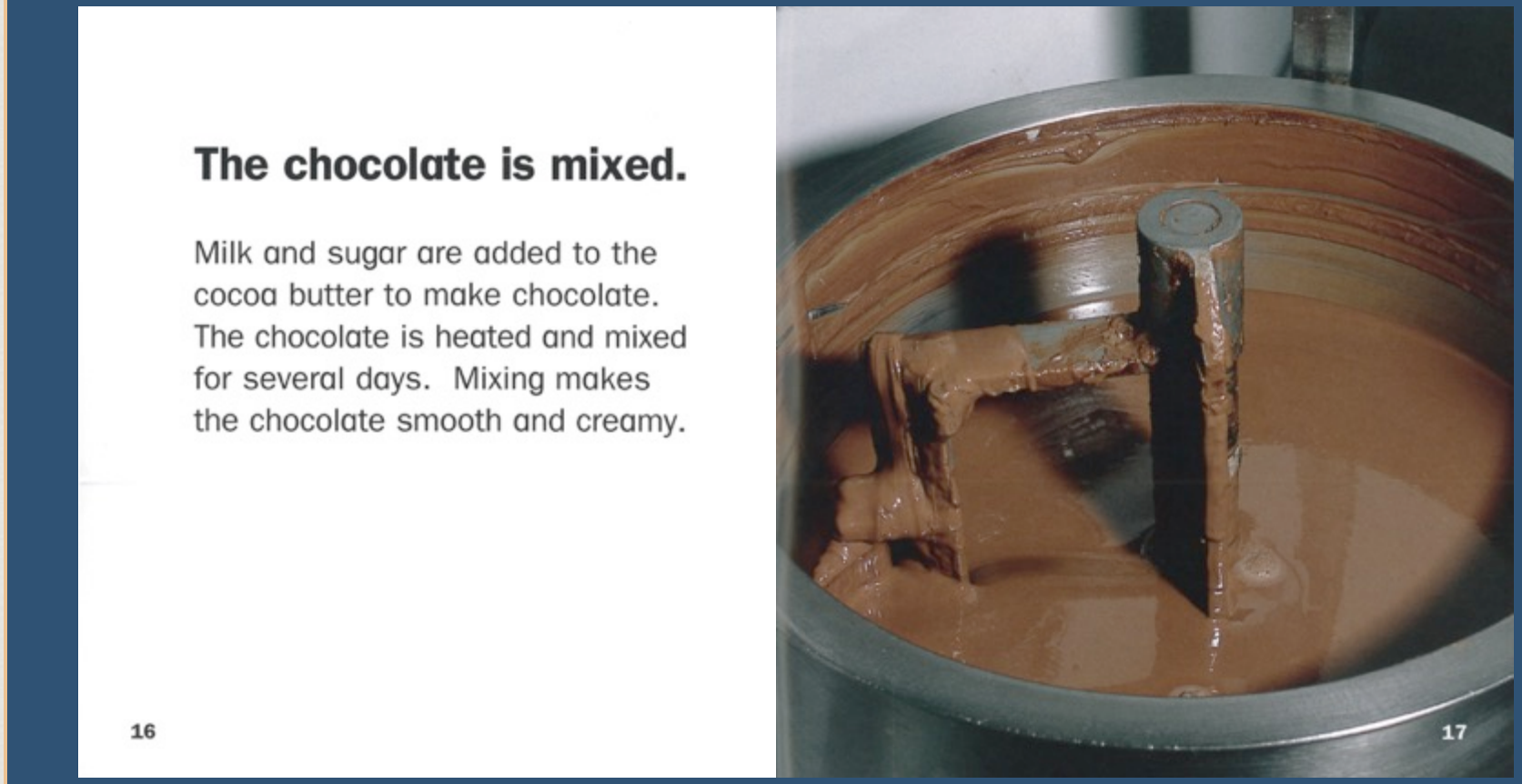
The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

Machines mash the beans.

The shells are taken off the beans. Then the beans are mashed. Mashing the beans turns them into a very soft paste called **cocoa butter.**

The CI Text Comprehension Model: Making a Difference in Comprehension Instruction



The chocolate is mixed.

Milk and sugar are added to the cocoa butter to make chocolate. The chocolate is heated and mixed for several days. Mixing makes the chocolate smooth and creamy.

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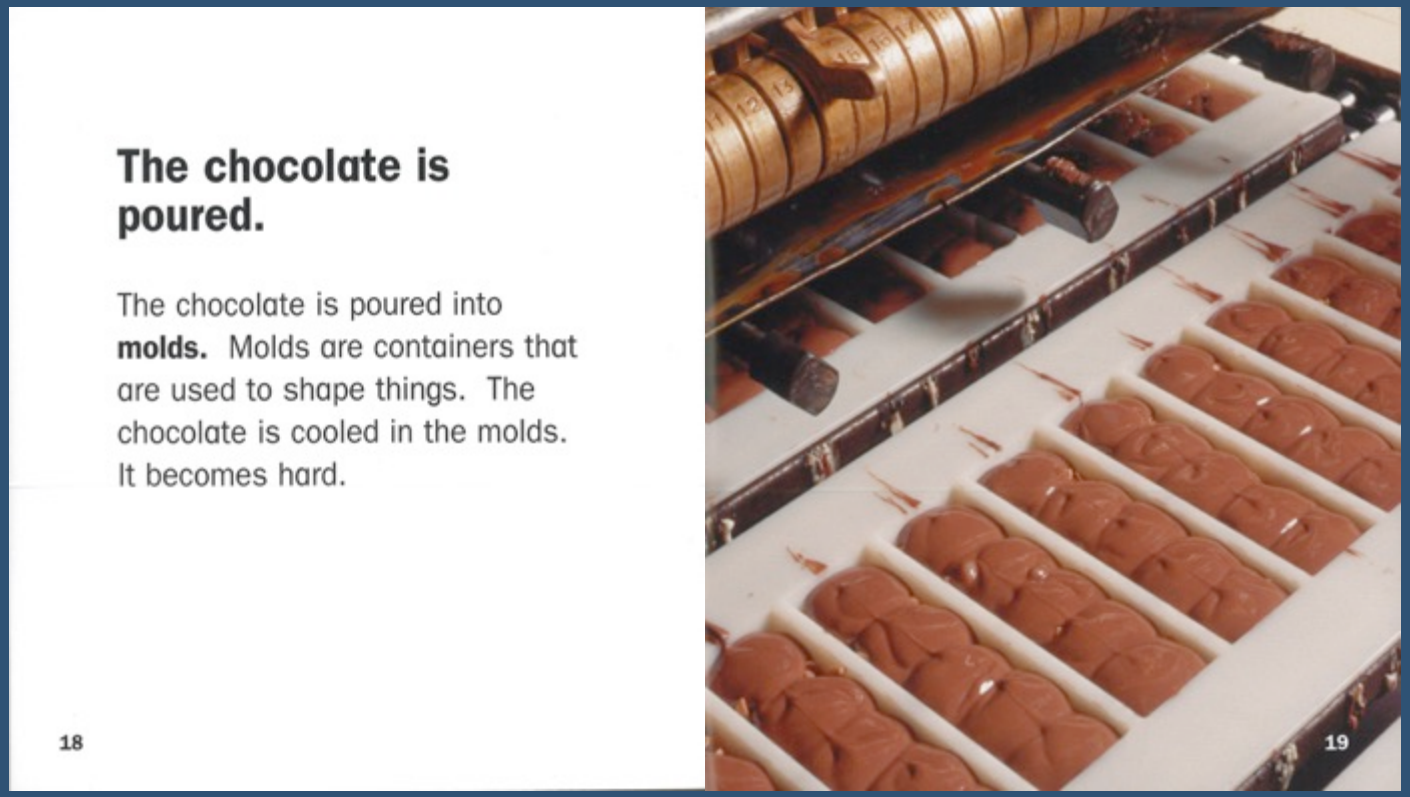
The CI Text Comprehension Model: Making a Difference in Comprehension Instruction



The chocolate is poured.

The chocolate is poured into **molds.** Molds are containers that are used to shape things. The chocolate is cooled in the molds. It becomes hard.

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The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

The chocolate is wrapped.

The chocolate is taken out of the molds. Machines wrap the chocolate. Trucks take the wrapped chocolate to stores to be sold.

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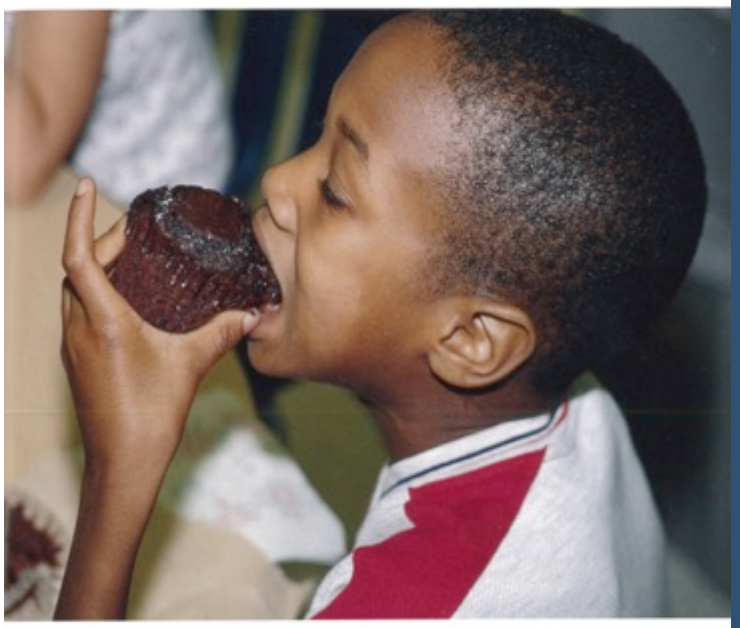
The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

I eat my favorite treat!

How many chocolate treats can you name? All of the chocolate in them started as cocoa beans!



The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

Glossary

cocoa beans (KOH-koh BEENZ): seeds of a cocoa tree

cocoa butter (KOH-koh BUH-tuhr): a soft paste made from mashed cocoa beans

factory (FAK-tuh-ree): a building where things are made

molds (MOHLDZ): containers used to shape chocolate

pods (PAHDZ): fruits of a cocoa tree

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Anchor Standard 4 – Individual Reading Standard 10 - Selecting an Appropriately Challenging and Complex Text

- Genre
- Theme/Topic
- Difficulty
- Interest
- Qualitative Supports/Obstacles in Text

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Constructing *Microstructure* as Represented in the CI Model

- Select Anchor Standard 1 – CI Level 1
- Select one or more individual Reading Standards
  (Standard 2)
- Select a Set of Evidence-Based Comprehension Strategies
  - Paraphrasing
  - Retelling
- Teacher Model Think Aloud
- Strategy Use to Construct Microstructure

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Constructing *Macrostructure* as Represented in the CI Model

- Select Anchor Standard 2 – CI Level 2
- Select one or more individual Reading Standards (Standard 5)
  - Select a New Set of Evidence-Based Comprehension Strategies
  - Text Features: bolded text and glossary
  - Close Reading
- Teacher Model Think Aloud
- Strategy Use to Construct Macrostructure

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Integrating to Create a Situation Model of the Text as Represented in the CI Model

- Select Anchor Standard 3 – CI Level 3
- Select one or more individual Reading Standards (Standard 7)
  - Select a New Set of Evidence-Based Comprehension Strategies
  - Visual Imagery/Illustrations
  - Close Reading
  - Discussion
- Teacher Model Think Aloud
- Strategy Use to Integrate Textbase with Background Knowledge to create a Situation Model of the text.

The CI Text Comprehension Model: Making a Difference in Comprehension Instruction

Integrating the Situation Model into World Knowledge as represented in the CI model

- Select Any Anchor or Individual Reading Standard (Standard 3 – *Describe connection between two individuals, events, ideas or pieces of information in a text.*)
- Select a New Set of Evidence-Based Comprehension Strategies
  - Use of Signal Words in Text
  - Graphic Organizer
- Teacher Model Think Aloud
- Strategy Use to Integrate Situation Model into World Knowledge Network

Diagnosing Comprehension Problems:

USING THE CI TEXT COMPREHENSION MODEL AS A LENS FOR ASSESSING AND DIAGNOSING CCSS INSTRUCTION

Diagnosing Text Comprehension Problems Using the CI Model as a Lens

Indicators of MICRO Structure Comprehension Problems

- Stops to understand or stumbles over words with unfamiliar meanings.
- Can't paraphrase the content of or retell a phrase(s) or sentence(s) after reading.
- Doesn't make connections among two or more sentences by using cohesion connectors or signal words.

Diagnosing Text Comprehension Problems Using the CI Model as a Lens

Indicators of MACRO Structure Comprehension Problems

- Do not understand specific literary devises employed by authors in literature.
- Do not understand how to make use of graphical devices provided by authors in informational texts.
- Cannot identify and use text structure.
- Cannot create and use graphic organizers to re-represent text structure.

Diagnosing Text Comprehension Problems Using the CI Model as a Lens

Indicators of Integration—Situation Model Comprehension Problems

- Has difficulty making inferences about the meaning of text at the paragraph unit size or larger.
- Fails to activate background knowledge to use in understanding a text.
- Has limited or conflicting background knowledge to understand a text.
- Evidence difficulty participating in and contributing to discussions of text.

Diagnosing Text Comprehension Problems Using the CI Model as a Lens

Indicators of Integration Into World Knowledge Comprehension Problems

- Cannot summarize the content of a text orally or in writing.
- Fail to make connections between personal experiences, other texts, and prior learning.
- Struggle to present or share ideas with others in presentations or reports
- Have difficulty writing in response to text.

Teaching and Assessing Comprehension in Elementary Classrooms

"…to develop the specialized knowledge discussed here…a model of text comprehension that foregrounds the importance of text analysis and of using the result to develop ways to support students in comprehending text information during reading is needed…"

Kucan, Hapgood, & Palincsar, 2011
The Elementary School Journal, p. 78

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