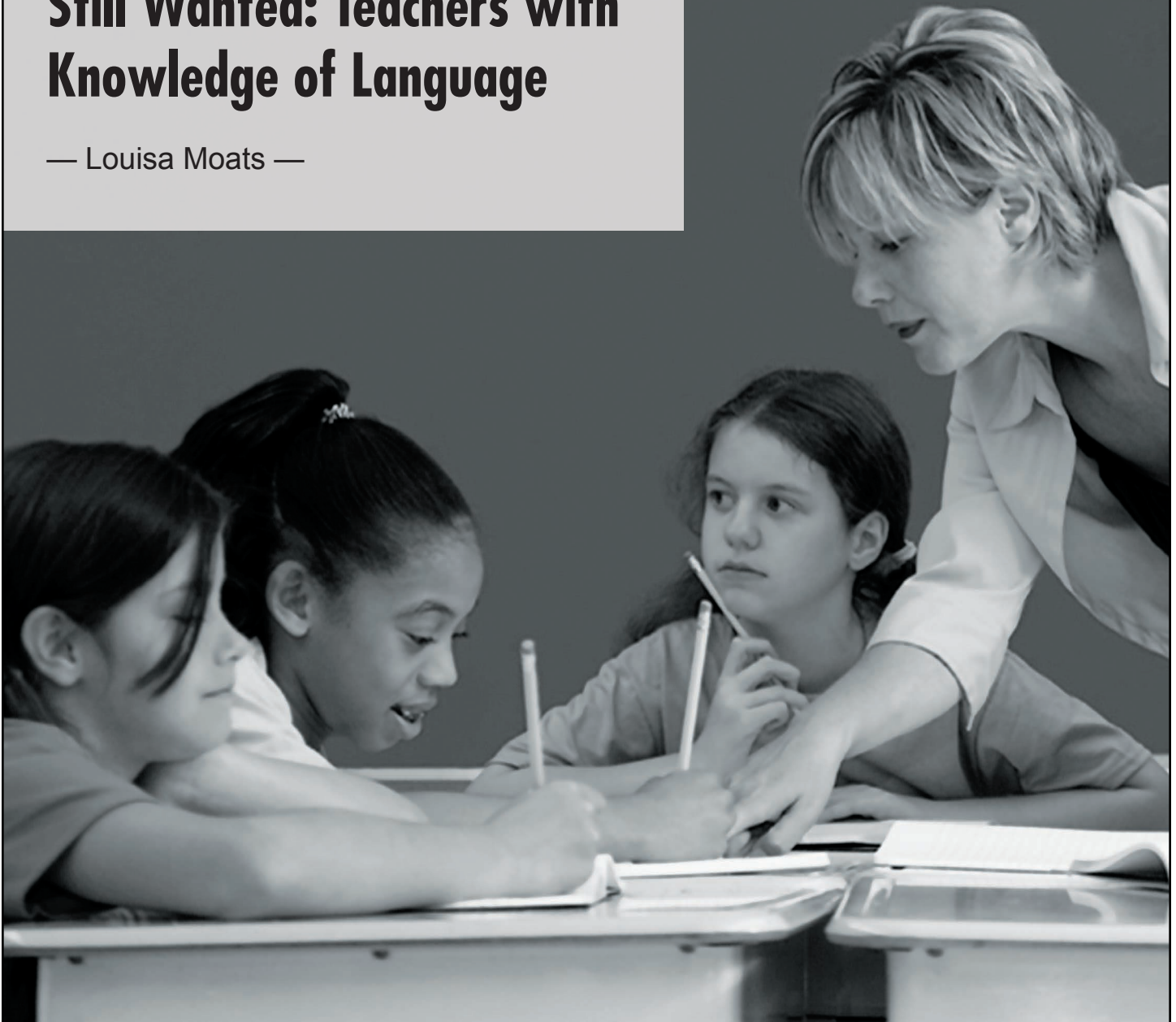


Still Wanted: Teachers with Knowledge of Language

— Louisa Moats —



PLAIN TALK ABOUT LITERACY AND LEARNING
New Orleans, LA | February 17-19, 2016



About the Presenter



Louisa Moats

Louisa C. Moats, Ed.D., has been a teacher, psychologist, researcher, graduate school faculty member, and author of scientific journal articles, books, and policy papers on the topics of reading, spelling, language, and teacher preparation. After a first job as a neuropsychology technician, she became a teacher of students with learning and reading difficulties, earning her Master's degree at Peabody College of Vanderbilt. Later, after realizing how much more she needed to know about teaching, she earned a doctorate in Reading and Human Development from the Harvard Graduate School of Education. Louisa spent the next 15 years as a licensed psychologist, specializing in evaluation and consultation with individuals who experienced reading, writing, and language difficulties.

Louisa was the site director of the NICHD Early Interventions Project in Washington, DC, where she was invited to testify to Congress three times on teacher preparation and reading instruction in high poverty schools. She recently concluded 10 years as research advisor and consultant with Sopris Learning. Louisa was a contributing writer of the Common Core State Standards, Foundational Reading Skills for grades K-5. In addition to the LETRS professional development series, her books include *Speech to Print: Language Essentials for Teachers*, *Spelling: Development, Disability, and Instruction*, *Straight Talk About Reading* (with Susan Hall), and *Basic Facts about Dyslexia*. Louisa's awards include the Samuel T. and June L. Orton award from the International Dyslexia Association for outstanding contributions to the field. Louisa is a member of the Professional Advisory Board of the Center for Development and Learning.

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Still Wanted: Teachers with Knowledge of Language

Louisa Moats, Ed.D.
Plain Talk
2016

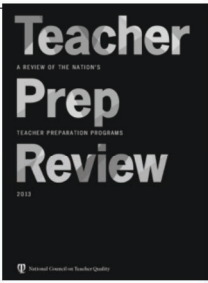
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Teachers' Disciplinary Knowledge: A Topic of Discussion for Years...

- *The Missing Foundation in Teacher Education*
- Moats, 1994, 1995
- *Wanted: Teachers with Knowledge of Language*
- Lyon & Moats, 1996
- *Informed Instruction for Reading Success*
- Brady & Moats, 1997
- *Teaching Reading is Rocket Science*
- AFT (Moats), 1999
- *Knowledge to Support the Teaching of Reading*
- Snow, Griffin, & Burns, 2005

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Why Do We Need Professional Development? (NCTQ)

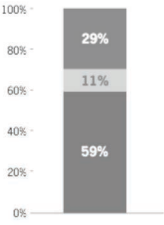


- Overall ratings on 608 institutions
- Additional data on another 522 institutions
- Altogether, data on where 99% of new teachers are trained

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NCTQ, continued.

Fig. 12. Distribution of scores on Standard 2: Early Reading (N=692 elementary and special education programs)



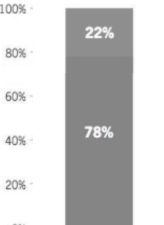
Rating	Percentage
1 or 2 stars	59%
3 stars	11%
4 or 5 stars	29%

- ★★★★★ or ★★★★☆
Program coursework comprehensively prepares teacher candidates to be effective reading instructors by addressing at least four of the five essential components.
- ★★★☆☆
Program coursework addresses only three of the five essential components, providing teacher candidates with some preparation in reading instruction.
- ★★★★★ or ★★★★★ (zero)
Program coursework cannot prepare teacher candidates to be effective reading instructors as it addresses at most two essential components.

4

NCTQ, continued.

Fig. 14. Distribution of scores on Standard 4: Struggling Readers (N=550 elementary programs)



Rating	Percentage
1 or 2 stars	78%
3 stars	22%

- ★★★★★
Program coursework adequately addresses strategies for struggling readers.
- ★★★★★ (zero)
Program coursework does not adequately address strategies for struggling readers.

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Is Experience the Answer?

- In study after study, teaching experience appears unrelated to or only somewhat related to knowledge of language structure or the processes of reading development

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What Do We Know About the “Declarative Knowledge” Base?

- Schemas are established early and are hard to change (especially with “indoctrination”)
- Many important concepts are elusive and are acquired through coursework, not by experience alone
- Teachers’ natural preferences, judgments, and intuitions are often at odds with what works

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Disciplinary Knowledge is Not Obvious, Natural, or Intuitive

Cunningham et al. (2009) asked teachers how they would *prefer* to teach reading.

- “...it appears that a philosophical orientation towards literature-based instruction tends to be more exclusive of other instructional approaches.”
- Teachers’ preferred practices do not conform to current research and policy recommendations for teaching 1st graders.

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“Philosophy” Matters

- “[1st grade teachers’] philosophical framework about reading instruction was germane to the extent teachers learned the content of direct methods of reading instruction.
- Those with a “whole language” orientation were less responsive to PD in phonology, phonics, and spelling.

(Brady et al., 2009)

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What Teachers Know, Affects What They Do

- “...Teachers who performed well on phonics tasks [on the knowledge survey] prefer spending more time on explicit and systematic instructional practices and less time on unstructured literature activities.”
- Prior knowledge [of language] plays a role in teachers’ choice of instructional activities.

-Cunningham et al.

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	University faculty	First Year Teachers
define and count the number of syllables correctly	≈ 92%	≈ 92%
Identifying the definition of a phoneme	98%	89%
correctly recognize that “chef” and “shoe” begin with the same sound.	92%	88%
correctly recognize a word with two closed syllables (napkin)	65%	53%
correctly recognize the definition of phonological awareness	58%	47%
No. of morphemes:		
heaven	40%	21%
Observer	26%	18%
Frogs	29%	24%
Name all the 5 components of NRP	15%	0%

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Good Instructional Programs Do Not Supplant Teacher Training

Piasta et al. (SSR, 2009)

- Students’ gains were predicted by the interaction between teacher knowledge and amount of explicit decoding instruction students received
- Highly scripted core curricula “cannot replace the expert teaching of highly knowledgeable teachers”
- More code instruction by teachers with low levels of knowledge did not produce student gains

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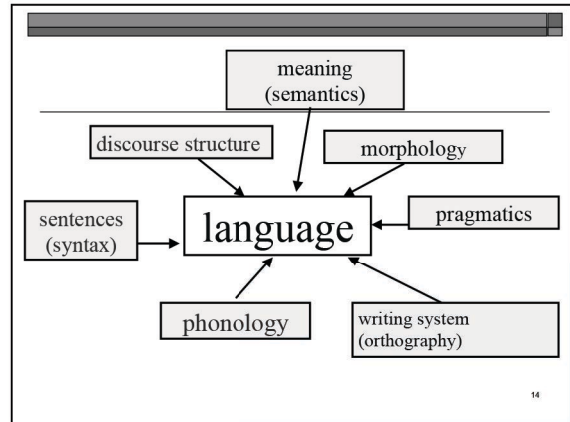
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[Teacher Educators are Not Prepared]

Binks-Cantrell, Joshi, & Washburn, “Peter effect in the preparation of reading teachers” (2012), *Scientific Studies of Reading*

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Phoneme Segmentation of “Hard Words”

LANGUAGE, SPEECH, AND HEARING SERVICES IN SCHOOLS, October 2008, 39, 512-520

	% correct	
	SLPs	Teachers
knuckle	90	73
sing	71	45
think	75	41
poison	60	34
squirrel	51	18
quick	70	11
box	61	10
start	31	6
fuse	21	3
use	17	3

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2nd Grade Student referred for “fluency” problem in reading.

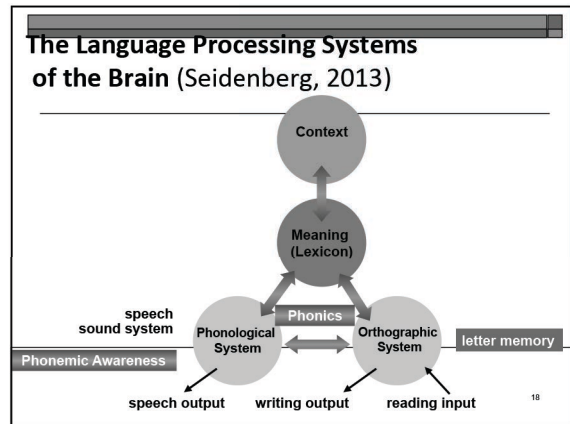
What does this student need?

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Where to focus instruction?

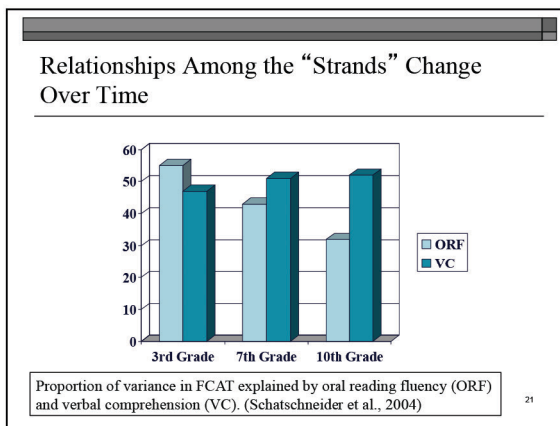
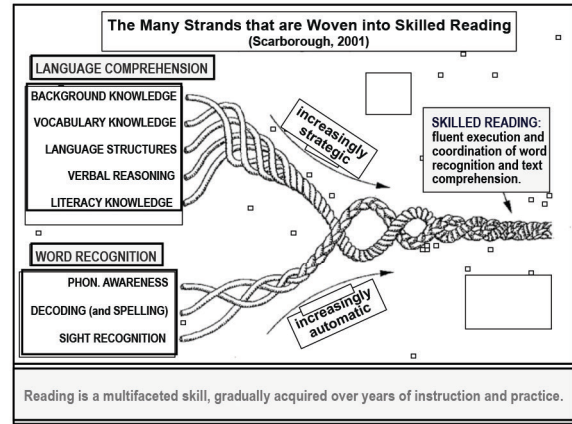
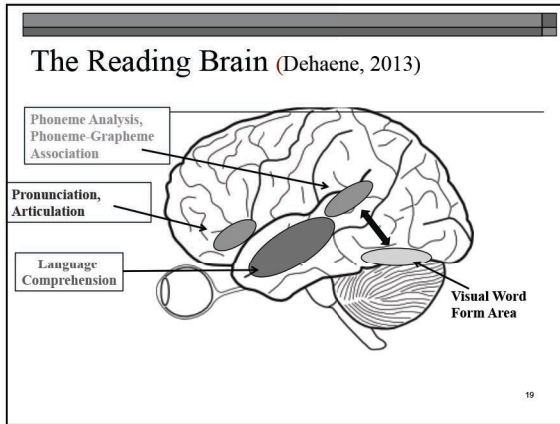
- Phonological and phoneme awareness.
- Using phonics to decode/spell accurately.
- Recognizing/writing “sight” words automatically.
- Knowing what most words mean.
- Constructing meaning; interpreting language; connecting the text with prior knowledge.
- Monitoring comprehension and repairing miscomprehension if necessary.

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Importance of Word Recognition at All Ages...

- ... of the 4th grade children who failed the State of Washington’s reading achievement test, over 40 percent of the students showed difficulties in word identification – either alone or in combination with fluency and/or comprehension.

Riddle, Buly, and Valencia (2002)

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A Phoneme is a Sound AND a Mouth Gesture

Consonant sounds are closed speech sounds.
What is your mouth doing as you say each of these sounds?

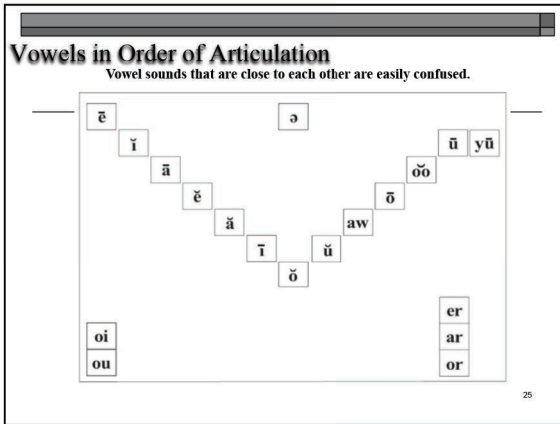
/p/ (pop) /t/ (tip) /k/ (back)
/b/ (bob) /d/ (dip) /g/ (bag)
/m/ (mob) /n/ (nip) /ng/ (bang)

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English Consonant Phonemes

	bilabial	Labio-dental	Inter-dental	alveolar	palatal	glottal	
stops							
unvoiced	/p/			/t/		/k/	
voiced	/b/			/d/		/g/	
nasals	/m/			/n/		/ŋg/	
fricatives							
unvoiced		/f/	/θ/	/s/	/ʃ/		
voiced		/v/	/ð/	/z/	/ʒh/		
affricates					/tʃ/		
unvoiced					/tʃ/		
voiced					/dʒ/		
glides					/j/	/w/	/h/
unvoiced							
voiced							
liquids				/l/	/r/		

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Why Is Phoneme Awareness Challenging for Novice Learners?

“Children faced with the task of learning to read in an alphabetic script cannot be assumed to understand that letters represent phonemes because awareness of the phoneme as a linguistic object is not part of their easily accessible mental calculus, and because its existence is obscured by the physical properties of the speech stream.”

(A. Liberman, 1989, *Haskins Laboratories of Yale University*)

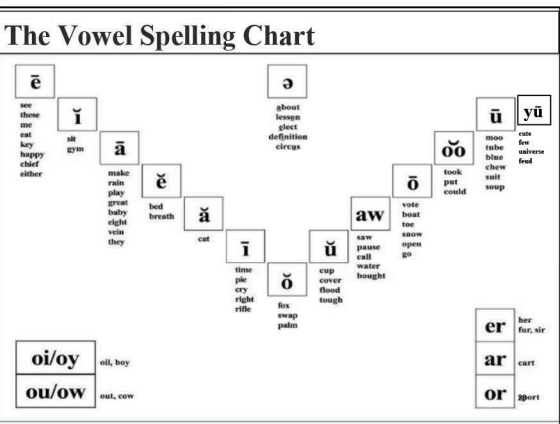
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Gaining insight into student errors...

Physical properties of the speech stream:

- coarticulation (*bump*)
- allophonic variation (*drive, cattle*)

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Context Does Not Drive Word Recognition or Printed Word Memory

□ “...Don’t know that word? Well just keep reading and see what might make sense here...”

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Configuration is not helpful.

Words are not recognized by shape.

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We read/spell this way:

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Graphemes represent phonemes.

d	r	i	ve		
b	u	m	p		
wh	e	n			
t	r	ai	n		
ch	a	s			

e

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What does the student need?

- ❑ Phoneme identification, classification, contrasts, with reference to articulation
- ❑ Phoneme segmentation, substitution, chaining
- ❑ Direct instruction – spellings for short vowels, digraphs, blends
- ❑ Phoneme-grapheme mapping, 1-syllable wds
- ❑ Generalization of decoding skills during text reading; spelling during dictation & writing

Ss

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How We Know a Word's Meaning

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How to Introduce a New Word

Pronounce and read the word. Examine the spelling. (Why?)

Tell students what the new word means, using a student friendly definition. (Why?)

Say more about the word. Use it several times while elaborating its meaning. (Why?)

Ask questions about the word's meaning.

Elicit word use by students.

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How to Introduce a New Word

Pronounce and read the word.
flexible

Examine the spelling.
flex – ible

Identify familiar parts (morphemes).
flex, to bend; -ible, an adjective suffix

Tell students what the new word means, using a student friendly definition.
“Flexible material can bend easily without breaking.”

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How to Introduce a New Word

Say more about the word. Use it several times.

The best gymnasts are very flexible; they can bend way over or do the splits.

Ask questions about the word's meaning.

Is hair flexible or brittle?

Elicit word use by students.

A healthy ankle can roll all around if it is _____.

My schedule can be adjusted; I'm _____.

Paperbook books bend in your hands; they are _____.

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Generalization

flexion	flexibility
inflexible	flexile
flexor	reflexive
reflection	reflective
deflect	circumflexion

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Why are these sentences challenging?

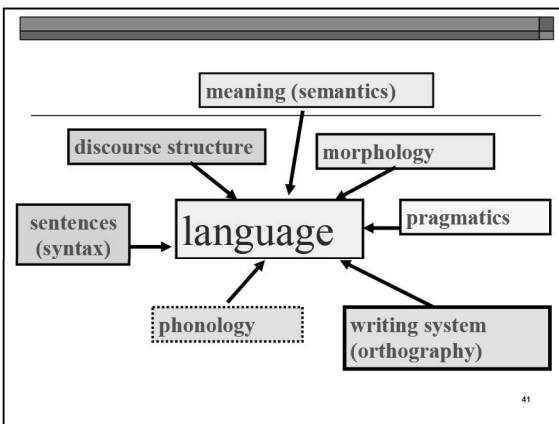
- The white van was hit head-on by the motorcycle.
- We had no reason to think that she was unstable.
- This is a major problem.
This is the major problem.
- She hesitated, although it would have been better to proceed.

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How should teachers differentiate?

- Learning style?
- Cueing system preference?
- "Level" of reading?
- Interest and motivation?
- Gender?
- IQ?

40

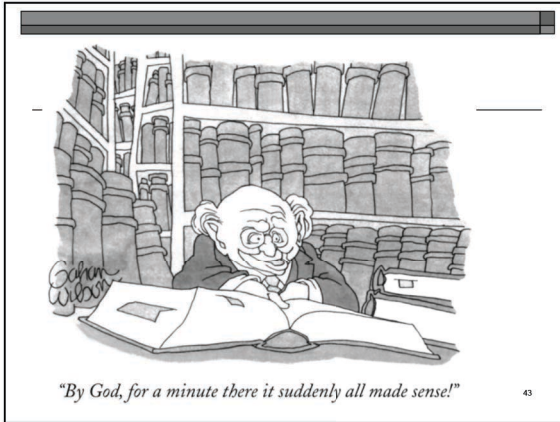


Concluding Recommendations:

- Use IDA's KPS for Teachers of Reading
- Require Reading Instruction Competency Exam developed by IDA (2016)
- Integrate language study into reading courses
- Develop more programs that teach all strands of language explicitly and systematically

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