

# Comprehension matters

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Slides available at

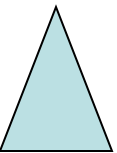
[www.scienceandliteracy.org](http://www.scienceandliteracy.org)

# Goals for Today's presentation

- Provide an historical perspective on the major threads we see in comprehension instruction today
  - The theory
  - The research
  - The practice
- Set a tone for examining the rest of today's presentations (hopefully???)
- Nothing is ever entirely new...

# A pre-history of RC

- Until 1914, reading meant oral reading not comprehension
- Accurate, fluent, expressive (declamatory) reading was the test
- Comprehension enters with silent reading and testing
- Comprehension is the result of instruction, not the object of instruction



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# Decoding matters

- Dominant view: The simple view:  
 $RC = Dec * LC$



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# Readability Matters

- Not only to longer words and sentences indicate that a text will be harder to read
- They make it harder to read
- So if you could just simplify the language you could increase comprehension.
- Consistent with the simple view: Why? Easier words and sentences are more accessible in LC repertoire.



# Two sources of complexity: syntactic and lexical

	Everyday Vocabulary	Academic Vocabulary
Syntactically Simple	A scientist wanted to make a new flavor. He wanted to make grass flavor. Grass is not safe food. He could not use real grass. He used other things. These things are safe. His new jelly bean smells like grass. It tastes like grass.	One scientist wanted to <b>invent</b> <sup>1</sup> a flavor. This was grass flavor. Grass is not <b>edible</b> . He could not <b>manufacture</b> the flavor. He used different <b>ingredients</b> . This jelly bean had the <b>odor</b> of grass. It had the taste of grass.
Syntactically Embedded	One scientist wanted to make a new flavor, grass flavor, <i>by</i> <sup>2</sup> using other things <i>because</i> grass is not safe to eat. He could not use real grass to make the flavor, <i>but</i> it smelled <i>and</i> tasted like grass.	One scientist wanted to invent a flavor, grass flavor. <i>by</i> using different ingredients <i>because</i> grass is not edible. He could not use grass to manufacture the flavor, <i>but</i> this jelly bean had the odor and taste of grass.

<sup>1</sup>Academic vocabulary

<sup>2</sup>Word indicating an embedded structure

# Something else must matter

- My grad school experience
- A gnawing feeling that there must be something more
- Most of my coursework was about research on
  - Perception (auditory and visual)
  - component skills
  - instructional routines
  - Remedial analyses

# Language matters

- Psycholinguistics movement
  - George Miller
  - Phil Gough
  - James Jenkins
  - John Bransford
- Psycholinguistics and Reading
  - Ken Goodman
  - Frank Smith
  - Dick Hodges
  - Dick Venezky



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# Syntax matters

- Chomsky and the derivational theory of complexity
  - Comprehension consists of analysis
- Generative Semantics
  - Comprehension consists of synthesis
- Groundbreaking work of Bransford



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# Conceptual relations matter

- Maybe longer and more obscure is not always harder.
- Trade-off between load on inference and load on short term memory
  1. Tree frogs have red eyes that help them see and find food at night.
  2. Tree frogs have eyes. These eyes are red. These eyes help them see. They help them find food. The tree frogs are awake at night.

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# Knowledge matters

- Schema Theory
- Comprehension is relating the new to the known.

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# Vocabulary matters

- Anderson and his colleagues
  - Why is vocabulary so consistently related to comprehension? Knowledge? Aptitude? Direct cause?
  - Nothing against direct vocabulary instruction, but...
  - We learn most new words incrementally, just by reading
    - 10% average gain on a single reading

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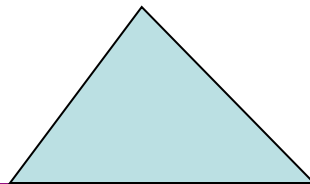
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# Meta matters

- Brown and her colleagues, building on work of John Flavell
- Paris translating them into instructional routines
- Palincsar and Brown into comprehension monitoring and comprehension fostering strategies



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# Strategies matter

- Building on the meta-work...
- Lots of us in the field (e.g. Pressley, Pearson, Dole, Duffy & Roehler, to name a few) developed a methodology...

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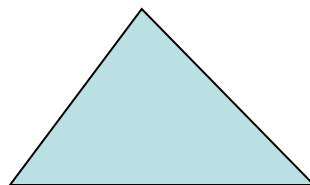
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# 1980s: Attempts to achieve a research-based approach to comprehension instruction

- Determine the skills that are associated with skilled reading
- In small scale experiments, teach the skills to kids who do not excel at them and determine whether learning them leads to improved comprehension for that passage, that skill, and for comprehension more generally construed.
- Build a streamlined comprehension curriculum of mainline skills/strategies



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# Construction matters

- Two dominant metaphors of the 1980s
- Build it: Constructivism:
  - The reader as writer: reading like a writer
- Monitor it, and if necessary, fix it

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# Reading matters

- Three traditions:
  - Anderson et al and the diary
  - Cunningham and Stanovich and print exposure (Title Recognition Test)
  - Warwick Elley and Book Flood
- Practices without strong evidence
  - SSSR and DEAR
  - NRP non conclusion

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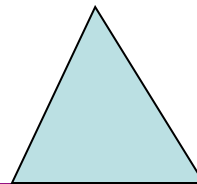
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# Engagement matters

- Central work of the NRRC in the early to mid 1990s
  - Comprehension without engagement isn't fulsome
  - Engagement dramatically increases comprehension, hence learning, hence knowing, hence comprehension.



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# Context matters

- The sociocultural turn
  - Heath
  - Harste, Burke, & Woodward
- Not just what we know or what we read, but where and why



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# Critique matters

- Texts are not neutral
- They have authors
- Authors have intentions, some known and volitional and others shaped by larger forces
- Whose interest are served by this text?
- Who's in charge?
- Who is missing?

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# Decoding matters

- The return of the simple view
- Take care of the code and its prerequisites
  - Phonemic awareness
  - Alphabet knowledge
  - Letter sound knowledge
  - Sequential decoding
- And if you do, oral comprehension (listening) will set the boundaries for reading comprehension

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# Balance matters

- My favorite instantiation:
- Freebody and Luke's Four Resources Model



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- Code breaker (cracking the code or cipher that maps spellings to sounds and vice-versa)
- Meaning maker (focusing on the message of the text, including the knowledge required to understand it)
- Text user (focusing on the pragmatics of use— what function does a text serve in a social context)
- Text critic (a critical competence that entails unpacking the social, economic, and political *assumptions* behind and *consequences* of using a text)

# Vocabulary matters

- A little different than earlier
- Context
- Morphology
- Inside-Outside perspective

# Subject Matter Matters

- Not quite like content issues of two decades earlier
- More attention to
  - Genre
  - Discourse
  - Ways of doing and thinking in the Subject Matter

# Strategies matter, again

- Thanks to
  - NRP
  - Michael Pressley
  - Scott Paris
  - Palincsar & Brown
  - Janis Almasi
  - Maybe Duke & Pearson
  - Mosaic of Thought...
- Thanks to their basalization

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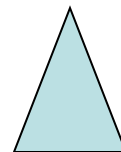
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# Conversations matter

- Book Club and Literature Circles
- Instructional Conversations
- Argumentative talk
  - Collaborative Reasoning
  - Philosophy for Children
- Accountable talk

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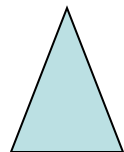
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# Assessment matters

- 1988: As long as we are going to teach to tests, we might as well have tests worth teaching to
- 2007: We teach to the tests we have, even when the test makers say that you shouldn't.
- The truth about assessment: we don't have a tool that does for comprehension what some version of running records does for accuracy/fluency/level

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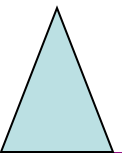
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# Does teaching matter

- Of course it does
- All of these effective interventions require a teacher, a coach, a facilitator, a planner, and
- Someone who knows how and when to turn over the reins to the learners
- Teaching matters most when learning matters most



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# Does teacher education matter?

- NRP evidence
  - teachers master strategy teaching
  - Student comprehension improves
- Staying the course matters in PD
- Yet to be answered
  - Knowing more about the subject improves student comprehension
  - Knowing more about discourse conventions improves conversations, and hence learning
    - Although teachers get lots better at orchestrating rich talk about text...

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# Is there anything that doesn't matter?

- Not much
- Why?
- Comprehension is the alpha and omega, the end and the means, of reading.
  - It is affected by everything
  - It, in turn, affects everything else

- The more they know, the better they understand
- The better they understand, the more they learn
- The more they learn, the more they know...
- This is the kind of vicious cycle I could get used to...
- See you throughout the day