

# No Word Is an Island: Teaching Vocabulary Through Word Relationships

Louisa Moats, Ed.D.  
Kansas MTSS Symposium

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## Acknowledgement...

- Some of the slides in this presentation are part of Module 4 of LETRS or are based on information originally presented in the module, a copyrighted material.
- I extend my gratitude to the many LETRS trainers who have contributed ideas to improve the work, and to Carol Tolman, who has coauthored the slide presentations in LETRS.

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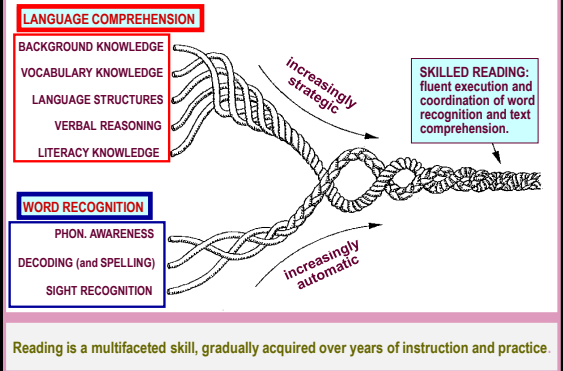
## SESSION OBJECTIVES

- Review the importance of vocabulary
- Understand why and how we learn words
- Learn techniques for teaching word relationships
- Practice the introduction of new words
- Identify extension activities to promote independent word learning

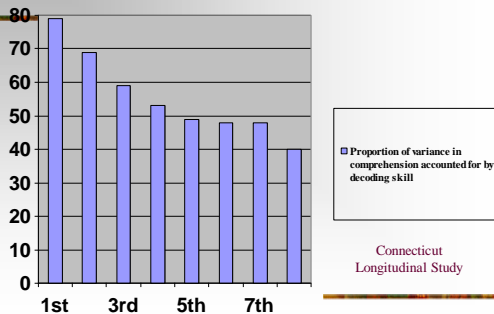
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## The Many Strands that are Woven into Skilled Reading (Scarborough, 2001)



## Variance in Comprehension Accounted for by Word Recognition Ability



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## What Do These Data Mean?

- ... decoding skill is necessary but not sufficient for learning to read, write, and spell
- ... as time goes on, vocabulary and language proficiency account for more and more of the variance in reading comprehension.

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## What Is Academic Language?

- Longer sentences with embedded clauses
- Paragraph and genre (text) structures
- Unusual, content-specific words
- Formal, conventional grammar
- Tighter logic, less redundancy
- Fewer conversational cues

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## Illustration, Text from *Stuart Little*

“One day when Stuart had recovered from **bronchitis**, he took his new skates and put on his ski pants and went out to look for an ice pond. He didn’t get far. The minute he stepped out into the street he saw an **Irish terrier**, so he had to **shinny** up an iron gate and jump into a garbage can, where he hid in a **grove** of celery.”

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## Academic Language: “Research Team Clones Human Embryos” (USA Today, 2-12-04)

“...Medical researchers hope to use cloned embryonic stem cells – which have the potential to grow into any kind of cell or tissue – to someday treat diseases such as diabetes and Parkinson’s. The cells potentially could create rejection-free transplant organ tissues.

Opponents of cloning fear the development will lead to cloned babies. They decry the destruction of human embryos to produce the stem cells.”

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## Newspapers: “Research Team Clones Human Embryos” (USA Today, 2-12-04)

“...Medical researchers hope to use cloned embryonic stem cells – which have the potential to grow into any kind of cell or tissue – to someday treat diseases such as diabetes and Parkinson’s. The cells potentially could create rejection-free transplant organ tissues.

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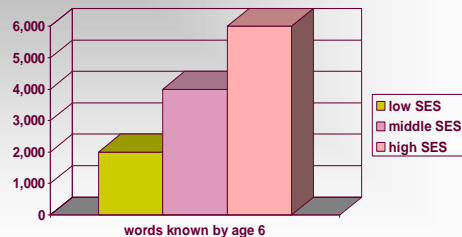
## Vocabulary: “Research Team Clones Human Embryos” (USA Today, 2-12-04)

medical (medic)	create, creation
researchers	rejection-free
cloned, cloning	transplant
embryonic, embryos	organ tissues
stem cells	opponents
potential, potentially	development
diseases	decry
diabetes	destruction (destroy)
Parkinson’s	human
	produce

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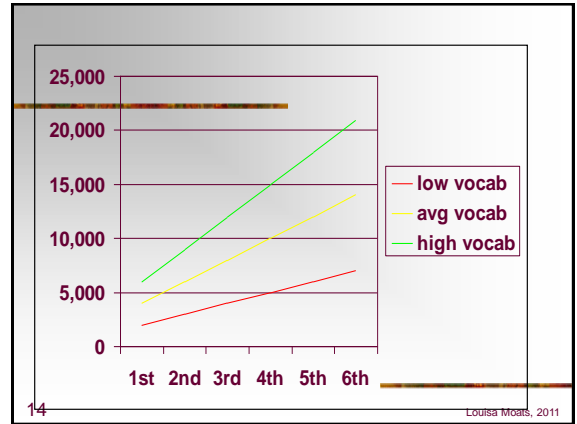
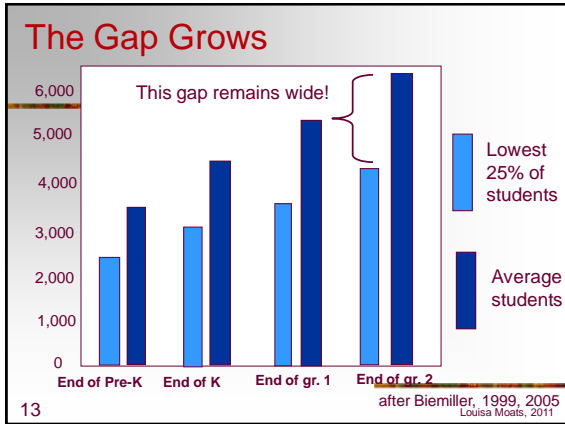
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## The Vocabulary Gap at Age 6



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### A Grown Vocabulary: What Do Children Need to Learn by 12<sup>th</sup> Grade ?

- Nagy and Anderson (1984) estimated that there are 88,700 word families in text up to 12<sup>th</sup> grade.
- 107 words account for 50% of the words in running text.
- 5,000 more words account for an additional 45% of the words in running text.
- Infrequent words (5% of total) carry the most unique meaning in a passage.

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### Differences in Text Exposure

Number of words, per year, children are exposed to, compared to time spent reading each day.

Words	Time
8,000 words	Less than 1 minute
282,000 words	4.6 minutes
1,800,000 words	20 minutes

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### The Importance of Vocabulary

- Predicts overall academic success
- Highly correlated with reading comprehension
- Facilitates fast, accurate word reading

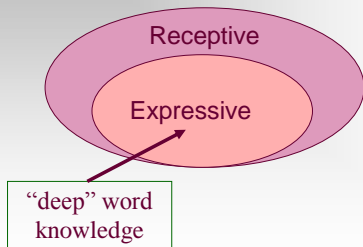
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### How Do We Learn Words?

- Incidental encounters with words in context
- Direct, planned, explicit teaching
- Fostering of **word consciousness** that enables students to learn words on their own

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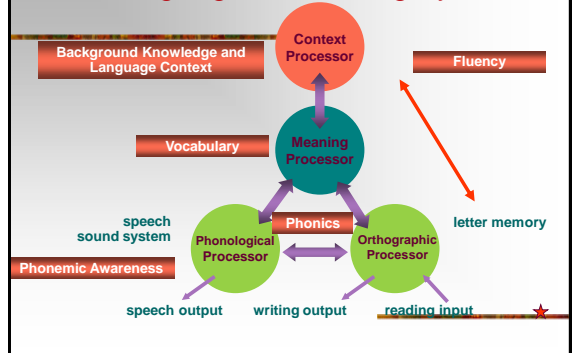
## Ways to "Know" a Word



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## Four Language Processing Systems



## Deep Knowledge of a Word

### Aspect of Language

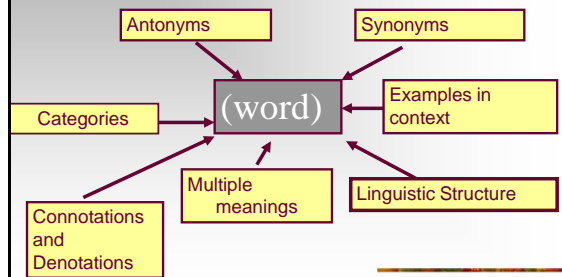
### Example

- syntactic role     ■ *to produce* (v.) vs. *produce* (n.)
- morphemes        ■ *pro* (prefix) + *duc* (Latin root)
- syllable structure ■ *pro* (open) + *duce* (VCe)
- graphemes        ■ p r o d u c e
- phonemes         ■ /p/ /r/ /ɒ/ /d/ /ū/ /s/

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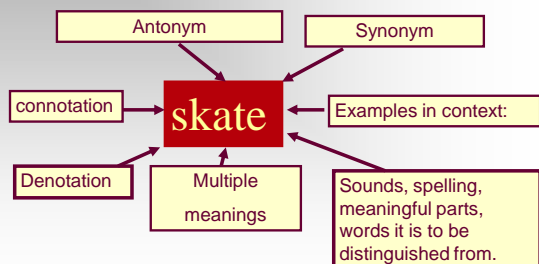
## Deep Knowledge of Words



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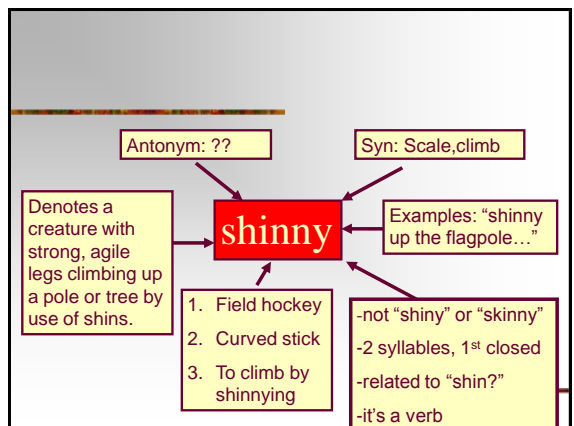
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## A Word Has Many Features

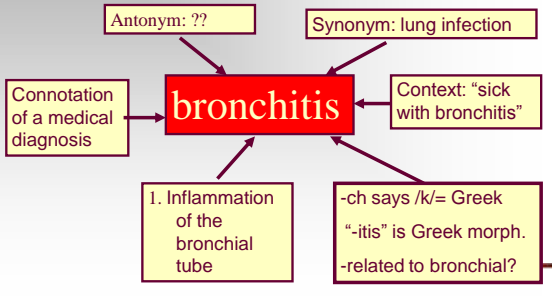


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## Exploring Dimensions of Word Knowledge



## Which Words to Teach Directly?

(Isabel Beck)

**Tier 1-** Basic, common words that students should learn on their own.

**Tier 2-** Most mature readers are familiar with them. “Core content” vocabulary. Can be found across various contexts and topics. Are central to the topic or theme.

**Tier 3-** Low-frequency words; many of these are domain specific.

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## Ex. 1: A Word You've Learned

- Think of a new word you have learned recently.
- Pair up with someone sitting near you and answer the following questions:
  - What was the context for that learning?
  - What motivated you to learn and remember that word?
  - What motivates your students to learn words?

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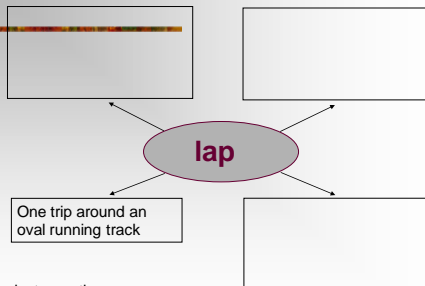
## Nominees for 2010 Word of the Year...

app  
refudiate  
vuvuzela  
gleek

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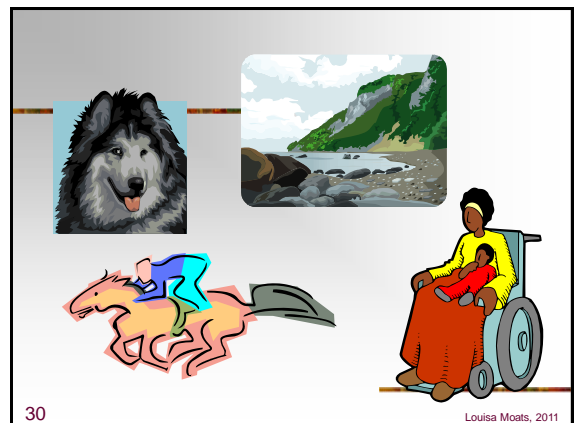
## Ex. 2, Multiple Meanings



Can you brainstorm other meanings for this word?

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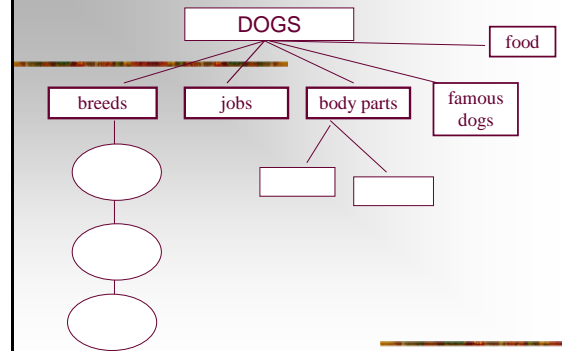
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## Ex. 3, Categories

- Listen to the words on the list.
- What are all the words about?
- What subordinate categories do they belong in?
- Use a graphic organizer that shows these word relationships.

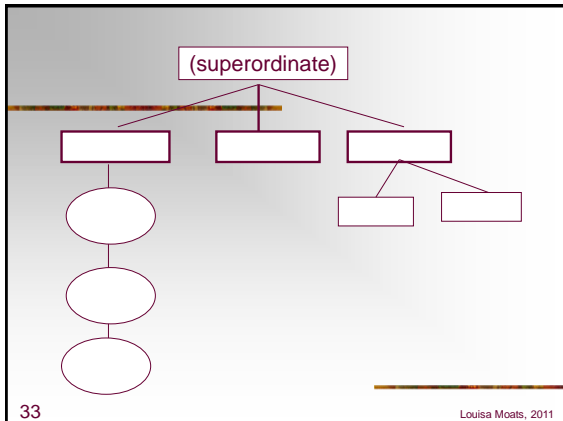
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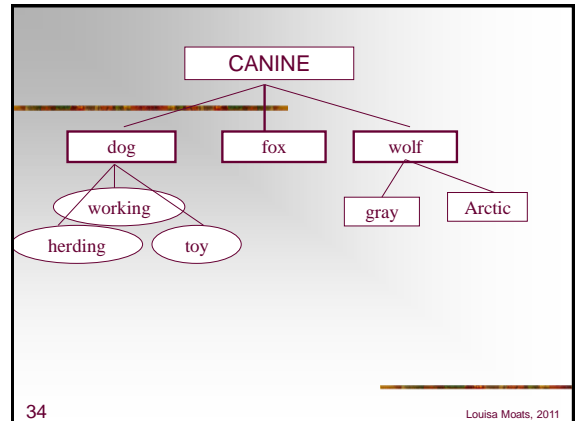
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## Why Categorize?

- If words aren't "filed" in the lexicon, they will be lost.
- Categories are fundamental structures of knowledge – aspects of the mental frameworks (schemas) that enable understanding.

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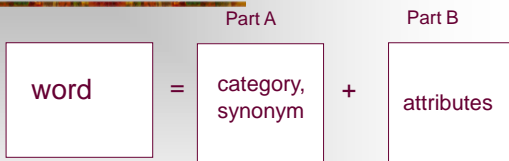
## Formal, Structured Definitions

- A darkroom is a room for developing photographs that has very dim, special light and running water.
- To plunder is to rob or pillage, usually by an invading or conquering group.

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## Formal, Structured Definitions



A \_\_\_\_\_ is (a) \_\_\_\_\_ that (is, does) \_\_\_\_\_.  
(word) (category, synonym) (attributes)

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## Ex 4, Making Definitions

Use the following format to write a definition for each word listed below:

A \_\_\_\_\_ is (a) \_\_\_\_\_ that (is, does) \_\_\_\_\_.

dog, canine

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## Ex.5, Scaling of Attributes

Put these words on a "scale" that indicates their relationships to one another:

placid, fierce, docile, accepting,  
ferocious, aggressive, gentle,  
energetic, menacing

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## Ex. 6, How to Introduce a New Word

Pronounce and read the word. Examine the spelling.

Tell students what the new word means, using a student friendly definition.

Say more about the word. Use it several times while elaborating its meaning.

Ask questions about the word's meaning.

Elicit word use by students.

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## Ex. 6, How to Introduce a New Word

**Pronounce and read the word.**

"semantics"

**Tell students what the new word means,** using a student friendly definition.

"the study of meaning and meaning relationships"

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## Ex. 6, How to Introduce a New Word

Say more about the word. Use it several times.

-semantics --- the study of sense; the stuff of thought; the concepts that underlie words; the nature of meaning;

Ask questions about the word's meaning.

"Could we say that ...."

Elicit word use by students.

"When we study or talk about word meaning, we are dealing with \_\_\_\_\_"

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## Extension: Select and Connect

### Column 1

definition  
dictionary  
breadth  
word conscious(ness)  
semantics

### Column 2

depth  
multiple meanings  
categories  
lexicon  
vocabulary

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## Extension: Word Structure Analysis

- Pare off prefixes and suffixes:

*incomparable = in + com + par + able; par + ity*

- Find word cousins:

*sanitation, sanitary, sanitarium, sanitize, sane, insane*  
(from the Latin layer of English, "sanitus" = "health")

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## Teach Word Building by Morpheme

co  
in  
sub  
con  
contra  
uni






**VERT,  
VERS**

-ion  
-ity  
-ible  
-ation  
-ical  
-atile

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## Semantic Feature Analysis

	has hair	swims	can be a pet	flies
	X		X	
	X			
	X			
		X	X	
			X	X

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## Word Consciousness

You know you are word conscious when...

- You are aware of your own word choices, and of others'.
- You intrinsically enjoy words and word play.
- You realize that words carry power!

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## For Lexophiles...

- A bicycle can't stand alone because it is two-tired.
- What's the definition of a will? (It's a dead giveaway.)
- Time flies like an arrow. Fruit flies like a banana.
- A backward poet writes inverse.
- In democracy, it's your vote that counts; in feudalism, it's your count that votes.

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## Notable Word Confusions...

- "My son is under the doctor's care and should not take gym. Please execute him."
- "Mary could not come to school today because she was bothered by very close veins."
- "Please excuse Dianne for her absence yesterday. She was in bed with gramps."

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■ From James Dent, the Gazeteer, parents' excuses. Louisa Moats, 2011

## Ways to Foster Word Consciousness (Stahl & Nagy, 2006)

- Collect, catalogue, or post examples of vivid, meaningful new terms.
- Locate new words used outside of class.
- Play language detective; notice and describe ways people express similar thoughts.
- Award points to students "caught" using chosen words in conversation or writings.
- Allow kids to select words for self-study.

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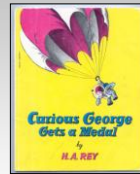
## The Value of Reading Aloud

- Exposure to new words in context.
- Enjoyment, motivation to read more.
- Practice listening to book language.
- Practice constructing mental images.
- Building background knowledge.

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## Language in Kids' Books



Sample Vocabulary Words In  
*Curious George Gets a Medal*

Scenes at the House	Scenes at the Farm	Scenes at the Spaceship
<ul style="list-style-type: none"> <li>• curious</li> <li>• fountain pen</li> <li>• funnel</li> <li>• blotter</li> <li>• garden hose</li> <li>• tap</li> <li>• ladder</li> <li>• escape</li> <li>• portable pump</li> </ul>	<ul style="list-style-type: none"> <li>• shed</li> <li>• loop</li> <li>• hustled</li> <li>• latch</li> <li>• grunting</li> <li>• squealing</li> <li>• grazing</li> <li>• rattling</li> </ul>	<ul style="list-style-type: none"> <li>• professor</li> <li>• flash</li> <li>• signal</li> <li>• bail out</li> <li>• emergency rockets</li> <li>• parrot</li> <li>• space suit</li> <li>• launching site</li> <li>• lever</li> <li>• groping</li> <li>• parachute</li> </ul>

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## Vocabulary Can Improve!

- In the Houston/DC Early Interventions Project, children in the kindergarten classes scored at the 17<sup>th</sup> and 5<sup>th</sup> %iles on vocabulary, respectively.
- By the end of the study (4<sup>th</sup> grade), children had improved to the 37<sup>th</sup> %ile on average. The key was effective reading instruction.

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## What is a word?

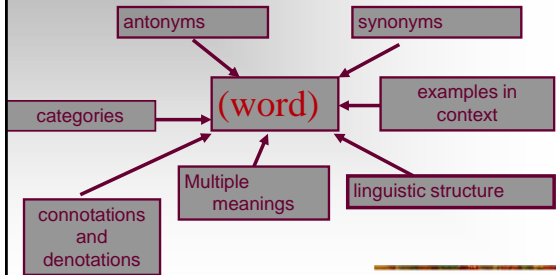
"a peg to hang ideas on."  
...Henry Ward Beecher



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## The Goal: Verbal Connectivity



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## Every Child, Every Day, Every Lesson

... “we need to transform the hours devoted to literacy instruction by doing what works best, according to the ablest researchers: providing explicit, coherent, and carefully cumulative approach to a broad range of knowledge and language.”

E.D. Hirsch, Overcoming the Language Gap, *American Educator*, Summer 2001

## Thank you!

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