

# Using Morphology to Improve Vocabulary

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Sorry kids, but story time is officially canceled. Apparently the love of reading won't make you College and Career Ready.



som<sup>ee</sup>cards  
user card

**Let's get back  
to making  
reading  
instruction  
fun,  
purposeful,  
and engaging!**





# Simple View of Reading



Gough & Tunmer, 1986



# SCARBOROUGH'S READING ROPE (2001)

## LANGUAGE COMPREHENSION

**BACKGROUND KNOWLEDGE**  
(facts, concepts, etc.)

**VOCABULARY**  
(breadth, precision, links, etc.)

**LANGUAGE STRUCTURE**  
(syntax, semantics, etc.)

**VERBAL REASONING**  
(inference, metaphor, etc.)

**LITERACY KNOWLEDGE**  
(print concepts, genres, etc.)

## WORD RECOGNITION

**PHONOLOGICAL AWARENESS**  
(syllables, phonemes, etc.)

**DECODING**  
(alphabetic principle,  
spelling–sound correspondences)

**SIGHT RECOGNITION**  
(of familiar words)

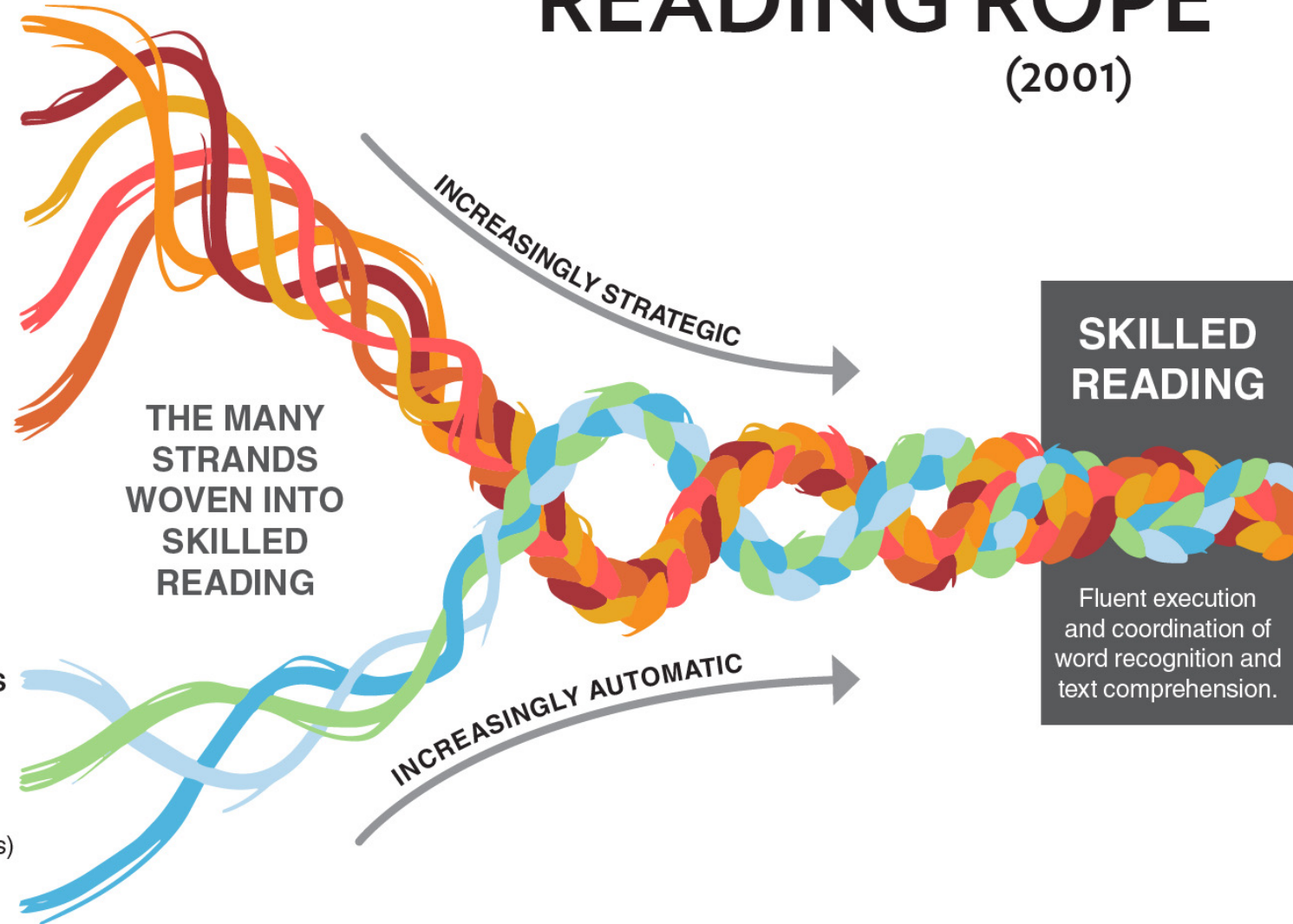
THE MANY  
STRANDS  
WOVEN INTO  
SKILLED  
READING

INCREASINGLY STRATEGIC

INCREASINGLY AUTOMATIC

**SKILLED  
READING**

Fluent execution  
and coordination of  
word recognition and  
text comprehension.





# **What is Morphology?**





# Morphology

morph + ology

**form**

**the study of**



# morpheme

- smallest unit of meaning in a word
- A word must always stand alone, but a morpheme doesn't have to stand on its own.

heat	+	s	=	heats (present tense)		
heat	+	ed	=	heated (past tense)		
pre	+	heat	=	preheat (heat before)		
re	+	heat	=	reheat (heat again)		
semi	+	heat	+	ed	=	semi-heated (half-way heated)



# Affix or Morpheme?

## Affix:

- Group of letters that attach before or after a root word
- Affixes that come before are prefixes.
- Affixes that come after are suffixes

## Morpheme:

- A morpheme is the smallest unit of meaning or grammatical function.
- A morpheme can be a root word, a prefix, or a suffix.





# Types of Morphemes

## Bound

☐ Appear only with other morphemes

- Inflectional
- Derivational
- Compound

## Free

☐ Stand by themselves



# Inflectional Morphemes

**There are 8 inflectional morphemes.**

- -s or -es (nouns)
- 's (nouns)
- -d; -ed (verbs)
- -s (verbs)
- -ing (verbs)
- -en; -ed (verbs)
- -er (adjectives; comparative)
- -est (adjectives: superlative)

## **Examples:**

- walk ⇨ walks
- John ⇨ John's
- change ⇨ changed
- spoke ⇨ spoken
- fast ⇨ faster



# Derivational Morphemes

**Derivational morphemes either:**

- **change the word's grammatical class**
- **change the meaning of the base**

## **Examples:**

- active  $\Rightarrow$  activity
- clear  $\Rightarrow$  clearance
- read  $\Rightarrow$  readable
  
- definite  $\Rightarrow$  indefinite
- happy  $\Rightarrow$  unhappy





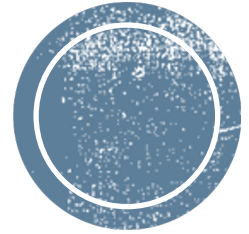
# Compound Morphemes

Two words combine to create a new word.

## Examples:

- tele + scope ⇒ telescope
- bio + ology ⇒ biology
- sub + marine ⇒ submarine





**How does it fit in  
with what we  
teach?**



# MS CCRS

- RF. 1.3—Know and apply grade-level phonics and word analysis skills in decoding words.
  - RF.1.3.D—Decode words with common prefixes and suffixes
- RF. 2.3--Know and apply grade-level phonics and word analysis skills in decoding words.
  - RF.2.3.D—Decode words with common prefixes and suffixes
- RF. 3.3-- Know and apply grade-level phonics and word analysis skills in decoding words.
  - RF.3.3.A—Identify and know the meaning of the most common prefixes and derivational suffixes.
  - RF.3.3.B—Decode words with common Latin suffixes.
- RF. 4.3-- Know and apply grade-level phonics and word analysis skills in decoding words.
  - RF.4.3.A—Identify and know the meaning of the most common prefixes and derivational suffixes.
  - RF.4.3.B—Decode words with common Latin suffixes.
- RF.5.3.A—Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology to read accurately unfamiliar multisyllabic words in context and out of context.
- L.6.4b—Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word.







# Why use Morphology?



- By the age of four, children from lower socio-economic statuses (SES) hear approximately 22 million fewer words than their peers from the most economically advantaged families. Children who hear fewer words learn fewer words, and this vocabulary deficit can affect school success (Anderson & Nagy, 1991).
- Students that come from low SES homes and perform poorly in reading often suffer from the “Matthew Effect,” a concept that describes the reciprocal relationship between vocabulary knowledge and reading ability (Stanovich, 1986).
- In one of his studies, Biemiller reported that, beginning in third grade, 95% of children could read more words than they could explain (2005).



- Academic text consists of 60-80% morphologically complex words with roots and affixes (Goodwin, 2016).
- Reed (2008) found the importance of phonological skills to morphological skills shifts around 4<sup>th</sup> grade.







**How did this tie  
into my research?**





# PARTICIPANTS

- Public Middle School, Grades 6-8, *Mississippi*
- Tier 2, Tier 3 and Academic Watch Reading Students
  - Criteria for selection
  - Recruitment
- 45 students were eligible for participation



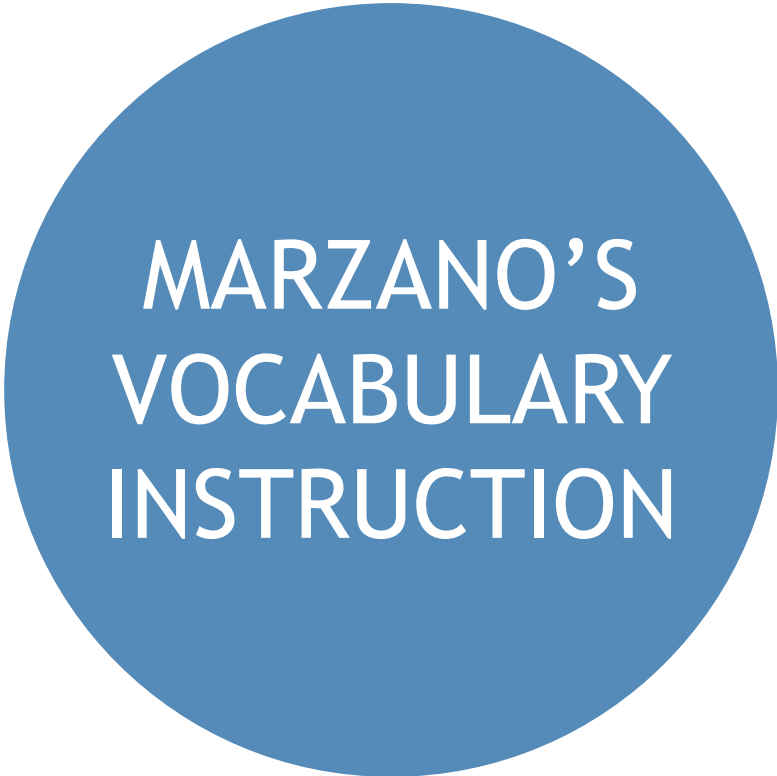


# METHODOLOGY

- Research Design
  - Vocabulary knowledge pre-test
  - Self-efficacy pre-test
  - Morphology intervention
  - Vocabulary knowledge post-test
  - Self-efficacy post-test
- Data Analysis



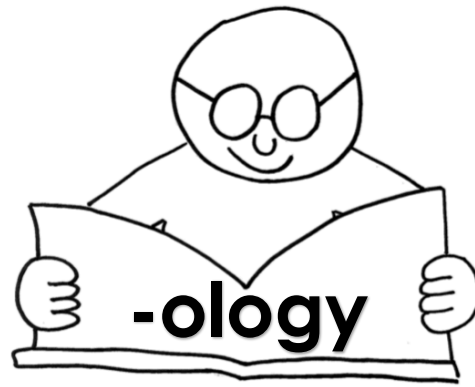




## MARZANO'S VOCABULARY INSTRUCTION

- **Step One:** Describe or explain the new term
- **Step Two:** Students restate the term in their own words.
- **Step Three:** Students develop a non-linguistic representation of the word.
- **Step Four:** Students participate in activities with the words.
- **Step Five:** Students discuss words in small groups.
- **Step Six:** Students play games with the new vocabulary words.

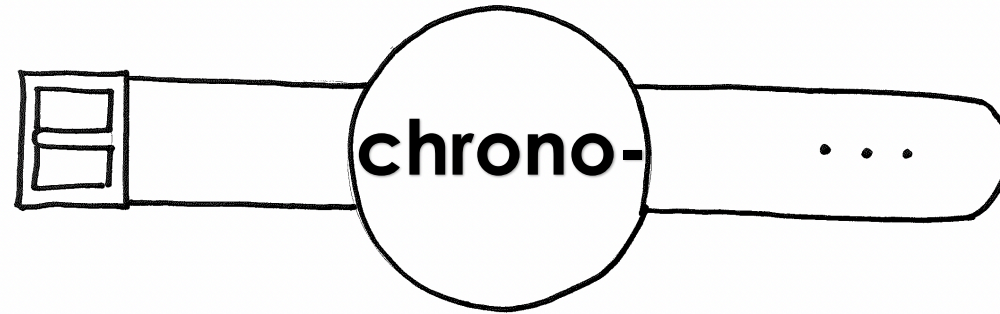




The suffix, “-ology,” means “the study of.”

Ex: *The man is studying **biology** which is the study of life.*





The prefix, "chrono-," means time.

Ex: A **chronology** is a study of the time of an event.





<b>Student Friendly Definition:</b>	<b>Student Illustration:</b>	<b>Other Word Forms:</b>
<b>Associations:</b>		<b>Synonyms:</b>  <b>Antonyms:</b>
<b>Sentence:</b>		

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<b>Sentence:</b>			



# Activities

- **Morphology Bingo-**

**<https://myfreebingocards.com/bingo-card-generator/preview/a7rfdxg>**

- **Find Your Partner**

- **Blooket**

- **<https://www.blooket.com/play?id=598648>**





# References

- Anderson, R., and Nagy, W. (1991). Word meanings. In R. Barr, M. Kamil, P. Mosenthal, and P.D. Pearson, (Eds.), *Handbook of Reading Research*, Vol. 2, pp. 690-724. New York: Longman.
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- Reed, D. (2008). A synthesis of morphology interventions and effects on reading outcomes for students in grades K-12. *Learning Disabilities Research & Practice*, 25(1), 36-49.
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