

How to Help Students Read Long Words

Supporting Older Readers with Advanced Decoding

Devin Kearns, Ph.D.
Goodnight Distinguished Professor in Early Literacy
North Carolina State University at Raleigh

Overview

- Why are **polysyllabic words hard to read**?
- How can we use **syllable-level strategies** to help students?
- How can we use **morpheme-level strategies** to help students?

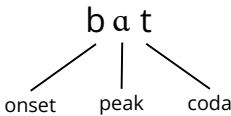
What kind of instruction will help?

Learning strategies for reading polysyllabic words

Syllables

robot
ro = /rou/
bot = /bat/

Units that contain one vowel sound.



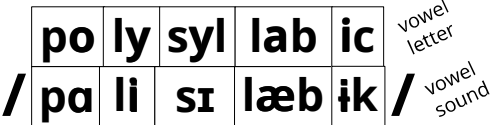
Bhattacharya & Ehri (2007)
Shippens et al. (2005)
Wise (1992)

(c) 2026 Devin M. Kearns | devin@devinkearns.com

1672

Definition of a *polysyllabic word*

It contains more than one syllable—usually marked by a vowel



Technically, syllables are sound units.

Clements & Keyser (1983)

onset peak coda
A peak is usually a vowel sound.
A unit with a peak is a syllable.

(c) 2026 Devin M. Kearns | devin@devinkearns.com

1673

Wait ... **polysyllabic**? **Yes.**

What is the linguistic origin of *syllable*? Greek

What is the linguistic origin of *poly*-? Greek

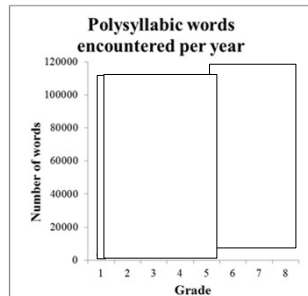
What is a word with more than one morpheme? *polymorphic*

So, that's why... But **multisyllabic** is fine too.

(c) 2026 Devin M. Kearns | devin@devinkearns.com

1674

Polysyllabic words become more common in texts in the upper grades



Kearns et al., 2016; Renaissance Learning, 2012; Zeno, Ivens, Millard, & Duvvuri, 1995

Polysyllabic words occur in a lot of content area texts

aesthetic	photosynthesis
constitutional	polynomial

(c) 2026 Devin M. Kearns | devin@devinkearns.com
Bryant, Cigal, Thompson, & Foster, 1999

1676

Students can use syllable information to improve reading

but...

syllables are TRICKY

(c) 2026 Devin M. Kearns | devin@devinkearns.com

1677

Blame the single-letter vowels in polysyllabic words

Single-letter vowels:
One letter that makes one sound

razor
meter
viper
motor
fusion
bygone

(c) 2026 Devin M. Kearns | devin@devinkearns.com

1678

Why blame the single-letter vowels?

viper /aɪ/
linen /ɪ/
glorious /i/
flexible /ə/
rabbit /ɪ/
raisin //

i

How many
pronunciations?
at least 4

(c) 2026 Devin M. Kearns | devin@devinkearns.com

1679

The consonants can be hard too

in...

what's the sound of ...

adventure	t	/tʃ/
vision	s	/dʒ/
kitten	tt	/r/

(c) 2026 Devin M. Kearns | devin@devinkearns.com

1683

Syllable-based strategies	So how can we possibly help?

Teach about open and closed syllables:
Practice syllable pronunciations

1725

Syllable-based strategies	
Syllable division	

Syllable division is a common approach in programs

Many based on the *Orton-Gillingham* approach

but the data about the value are not strong

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1731

How does syllable division work?

breve short sound
macron long sound

1732

How often does this actually help?
Data on VC|CV in bisyllabic words

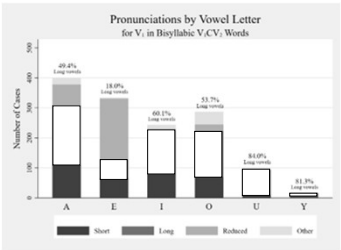
Black = short sound (follows the pattern)

Vowel Letter	Short (Black)	Long	Reduced	Other
A	74.2%			
E	36.4%			
I	93.8%			
O	64.3%			
U	81.4%			
Y	68.8%			

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1733

How often does this actually help?
Data on V|CV in bisyllabic words

Dark gray = long sound (follows the pattern)



(c) 2026 Devin M. Kearns | devin@devinkearns.com

1734

Stop & Jot

• Think of three words (not used already) and write a numbered list in the chat:

1. a disyllabic word with a short-vowel first syllable that follows the VC|CV pattern
2. a disyllabic word with a long-vowel first syllable that follows the V|CV pattern
3. a disyllabic word with a long-vowel first syllable that does not follow the V|CV pattern
4. (optional) a disyllabic word beyond all reason (weirdly complicated)

Example:

1. rabbit
2. tiger
3. dragon
4. chicken (what about the /k/ and the ck?)

(c) 2026 Devin M. Kearns | devin@devinkearns.com

1739

Syllable-based strategies

ESHALOV

Every syllable has at least one vowel

ESHALOV

Check that **Every syllable has at least one vowel**
Divide into syllables between the vowels

fantastic ESHALOV? Divided OK?
fantastic ✓ ✓
fantastic ✓ ✓

(c) 2026 Devin M. Kearns | devin@devinkearns.com

1741

ESHALOV

Check that **Every syllable has at least one vowel**
Divide into syllables between the vowels

reduce ESHALOV? Divided OK?
reduce ✓ ✓

(c) 2026 Devin M. Kearns | devin@devinkearns.com

1742

ESHALOV

Check that **Every syllable has at least one vowel**
Divide into syllables between the vowels

reduce ESHALOV? Divided OK?
reduce ✓ ✓
reduce ✓ ✓

(c) 2026 Devin M. Kearns | devin@devinkearns.com

1743

Syllable reading strategies

Flexible syllable division strategy

Practice reading by syllable with flexibility

Syllable Card

ri

This assumes knowledge of the long-vowel and short-vowel patterns.

Practice reading by syllable with flexibility

- Mark the vowels
- Divide the word one way to make a word
 - make single-letter vowels open or closed
- If that doesn't make a word, try the other way

Syllable Card

dra

long-vowel syllable

dray

gawn

What word sounds like that?

Not a word. I'll try the other way.

dray-gawn

dray-gun

Practice reading by syllable with flexibility

- Mark the vowels
- Divide the word one way to make a word
 - make single-letter vowels open or closed
- If that doesn't make a word, try the other way

Syllable Card

drag

short-vowel syllable

drag

awn

What word sounds like that?

dragon

drag-awn

Practice reading by syllable with flexibility

- Mark the vowels
- Divide the word one way to make a word
 - make single-letter vowels open or closed
- If that doesn't make a word, try the other way

Syllable Card

ma

long-vowel syllable

may

jor

What word sounds like that?

may-jor

major

Let's try it together...

- Mark the vowels
- Divide the word
 - Make sure every syllable has at least one vowel.
 - For single-letter vowels, make long-vowel syllables or short-vowel syllables.
- Say the syllables and then blend them.
 - Is it a word?
 - If not, divide another way
 - Is it a word?
 - If not, ask for help.

Yes! This is a word. I make a habit of using flexible syllable division.

it

It works for vowel teams and VCE words

- Mark the vowels
- Divide the word one way to make a word
 - make single-letter vowels open or closed
- If that doesn't make a word, try the other way

raisin
Syllable Card
ray sin ray-zin raisin

relate
Syllable Card
rel ate rel-ate relate

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1752

It works for vowel-R and consonant-LE... Try it

- Mark the vowels
- Divide the word one way to make a word
 - make single-letter vowels open or closed
- If that doesn't make a word, try the other way

carton

bubble

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1753

What kind of instruction will help?

Learning strategies for reading polymorphemic words

Morphemes

Written and spoken letter combinations that represent concepts

re = /ri/ again

er = /ɜ:/ someone who comparative adjective

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1763

Polysyllabic words are often polymorphemic

52% of words are polysyllabic

■ Monosyll. □ Monomorph. ▨ Compound ■ Inflected □ Derived

(c) 2026 Devin M. Kearns | devin@devinkearns.com Naggy & Anderson (1964); Frost (2012) 1764

Polysyllabic words are often polymorphemic

52% of words are polysyllabic

7%	morphologically basic
12%	contracted / compound

cider **aren't** **sailboat**

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1765

Polysyllabic words are often polymorphemic

de	-sic	-s
----	------	----

12%	affixed (derived)
16%	inflected

root (base) word

derivational suffix

inflection

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1766

How does morphology help readers?

humuhumunukunukuapua'a

antidisestablishmentarianism

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1776

Which was easier to read? Why?

humuhumunukunukuapua'a

antidisestablishmentarianism

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1777

What can we learn from the morphemes in the word?

antidisestablishmentarianism

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1778

What can we learn from the morphemes in the word?

antidisestablishmentarianism

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1779

What can we learn from the morphemes in the word?

antidisestablishmentarianism

... removing

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1780

What can we learn from the morphemes in the word?

antidisestablishmentarianism

one who favors

removing

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1781

What can we learn from the morphemes in the word?

antidisestablishmentarianism

against

one who favors

removing

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1782

What can we learn from the morphemes in the word?

antidisestablishmentarianism

against

one who favors

removing

doctrine

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1783

What can we learn from the morphemes in the word?

The doctrine of being a person who is against tearing down the establishment.

antidisestablishmentarianism

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1784

And fun fact...

humuhumunukunukuapua'a

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1785

And fun fact...

humuhumunukunukuapua'a

triggerfish

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1786

And fun fact...

humuhumunukunukuapua'a

snout

triggerfish

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1787

And fun fact...

humuhumunukunukuapua'a

snout

triggerfish

resembling

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1788

And fun fact...

humuhumunukunukuapua'a

snout

pig

triggerfish

resembling

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1789

But it is still a tricky sometimes...

understand

not / opposite of

comparative / someone who

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1790

But it is still a tricky sometimes...

~~understand~~

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1791

But it is still a tricky sometimes...

understand

among / between / secretly

stand

in the metaphorical sense

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1792

There are morphologically confusing words...

archer corner
henchman butterfly

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1793

There are morphologically confusing words...

gummyberry

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1794

So what do we do?

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1795

Teach the peeling-off strategy

- Teach students individual affix pronunciations.

re tion less ment

pre

Pre. P-R-E.

Let's add it to the peeling-off tree

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1796

Teach the peeling-off strategy with common morphemes

Most Common Prefixes			Most Common Suffixes		
Prefix	Meaning	Key Word	Suffix	Meaning	Key Word
anti-	opposite	antibiotic	-able	capable of being	readable
bio-	life	biology	-ed	past tense	walked
co-	together	cooperate	-er	one who	teacher
dis-	opposite	dislike	-ing	present participle	reading
dis-	not	dislike	-less	without	careless
dis-	apart	disagree	-ment	state of being	development
dis-	down	discontinue	-ness	quality	happiness
dis-	against	disagree	-tion	action	action
dis-	away	disappear	-ive	having the quality of	active
dis-	apart	disagree	-ly	in a manner	happily
dis-	apart	disagree	-ous	characterized by	ambitious
dis-	apart	disagree	-y	characterized by	happily

Note: There are more common suffixes than prefixes.

Find a list of common affixes.
Create a peeling-off tree as an anchor chart.
Explain and review meanings (when they have them).
Practice reading with flash cards.

pre re tion less ment

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1800

Teach the peeling-off strategy

- Identify known affixes on the peeling-off tree
- Read the base word
- Chunk the word with the affixes attached

pre re tion less ment

statement

state

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1800

Teach the peeling-off strategy

- Identify known affixes on the peeling-off tree
- Read the base word
- Chunk the word with the affixes attached

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1801

Use the peeling-off strategy for spelling

- Say the word
- Say it by syllable
- Look for affixes on the peeling-off tree
- Spell it by syllable

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1802

Knowledge for effective instruction

Choosing the optimal words

Choose to use nonsense words strategically for practice

inveterate guessers

multilingual learners?

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1822

Teach reasonably familiar units

? candid
pipkin
kidnap
rustic?

hobnob
sublet?
septic?
dismiss

polish off the gumdrops

What do you imagine students thought this meant?

removing sugar crystals from the outside of gumdrops

gumdrop polishing

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1823

Teach reasonably familiar units

Use words (and phrases) that students likely have heard before

uncommon?
OK
rare?
not so much

gumdrop polishing

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1824

Preteach pronunciations of less familiar words to mastery

Let's say some words we will hear during blending.

Listen: *discontinue*. What's the word?

Yes, *discontinue*. Companies discontinue unpopular products. By syllable: *Dis, con, tin, you*. Your turn.

Discontinue.

Dis, con, tin, you.

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1827

Knowledge for effective instruction

Linking to the lexicon

We link to the lexicon when we can...

sufferance 
3 times per 100,000,000 words **he can't link the word**

swiftness 
3 times per 10,000,000 words **he can link the word**

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1832

So, we can teach students to link to the lexicon

Wait... are you talking about using whole language?

I'm actually saying...

No, do not **use whole language**

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1833

Linking to the lexicon: Finding a lexical entry



What is this called? • "Set for Variability" • lexical verification • mispronunciation correction	Why is it important? • Research shows that it is more connected with reading skills than phonological awareness	How does it work? This is Peter, a silly lion who can talk. Today we're going to play a word game with Peter. In this game Peter tries to say a word but he says it the wrong way. I want you to listen to what Peter says and tell me what he is trying to say. How do we measure it?
--	--	--

(c) 2026 Devin M. Kearns | devin@devinkearns.com 1834

Linking to the lexicon: How do we teach it?

- Mispronunciation correction...

Why *might* mispronunciation correction improve word recognition?

- Readers always try to connect words to the lexicon
- We are almost always wrong when we sound out words
- Polysyllabic words have reduced vowels... *almost all of them*

Research: Does it work? Savage et al. (2018) Instruction

1. Learn word recognition using typical structured literacy.
2. Practice blending words using correction plan
3. Listen to teacher say words incorrectly and correct them

Simon says touch your
nose, ear, sh-owl-der

Correction Plan

1. Blend word with taught phonic rules.
2. Ask "Is this a word I know?"
3. Select a different pronunciation for graphemes that "flip."
4. Blend word again.
5. Ask "Is this a word I know?"

(c) 2026 Devin M. Kearns | devin@devinkearns.com

1840

How do you teach mispronunciation correction?

Practice linking to the lexicon
lexical verification



Read words

Blend word with taught phonic rules.
Ask "Is this a word I know?"
Try again if needed.

Practice oral
correction

Puppet: My-stir-ee
Students: *Mystery*

Abdel Rahman, van Turenhout, & Levett (2003) N200

(c) 2026 Devin M. Kearns | devin@devinkearns.com

1841

How do you teach mispronunciation correction?

Learn alternative
vowel
pronunciations

at a ate

- Stop
- I'll try both sounds
- First I'll try /æææ/ as in at.
- Then, I'll try /eee/ as in ate.
- Go when I have the right word.

Vowel Alert from
Empower
(Lovett et al., 2000)



(c) 2026 Devin M. Kearns | devin@devinkearns.com

1842