

READING TEACHING READING IN BRIEF

READING AND THE BRAIN: MAPPING PHONEMES TO GRAPHEMES **VOL. 2, NO. 4**

The Importance of Teaching Inflectional Suffixes for Language Development

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Introduction

In this article, we share strategies for teaching inflectional suffixes using Phoneme Grapheme Mapping[™] (PGM). PGM strengthens the relationship between sounds and letters, aiding in word decoding. It provides explicit, systematic support for students who struggle with sound identification and/or spelling.

Inflectional suffixes are vital for understanding and constructing meaning in language. These endings allow us to modify the grammatical function of a word without altering its core meaning, providing essential information such as plurality, tense, or possession. (e.g., cat/cats; walk/walks/walking/ walked; dog/dog's collar. Inflectional suffixes convey nuanced meaning in oral and written English oral and written communication. As Birsh and Carreker (2018) explain, "Inflectional suffixes are endings added to base words (e.g., -s, -ed, -er, -est, -ing) that change their number, tense, voice, mood, or comparison" (p. 828).

Explicit instruction in inflectional suffixes provides students with essential language skills that contribute to:

- 1. Vocabulary Development: Understanding suffixes helps students grasp the nuances of new vocabulary and expands word knowledge
- 2. Language Structure Mastery: Teaching inflectional endings reinforces grammatical rules and aids sentence construction.

- 3. Reading and Writing Proficiency: Understanding inflectional suffixes leads to faster decoding of words and more accurate spelling, which improves reading and writing fluency.
- **3. Comprehension Skills:** Understanding suffixes supports deeper comprehension of text and speech.

Phoneme Grapheme Mapping™

Phoneme-grapheme mapping is the process of identifying individual phonemes (speech sounds) in a word and matching them to their written symbols (graphemes). This connection is foundational for developing decoding and encoding skills. Ehri (2013) emphasizes that, "Orthographic mapping is enabled by phonemic awareness and phoneme-grapheme knowledge" (p. 5). Phoneme Grapheme Mapping™ facilitates the brain activity of orthographic mapping by representing it in visual form.

PGM uses sound boxes to help students map phonemes to print Each box represents one phoneme in a word, helping students visually and kinesthetically connect sounds to their written representations.

In brief, to use sound boxes for instruction, the teacher begins with simple words where each phoneme corresponds to a single grapheme. For instance, the word *mat* contains three phonemes: /m/, /ă/, /t/ which would be represented by three sound tokens. Each token corresponds to one sound box on the Phoneme Grapheme Mapping™ grid.

Curious Question: Which of the following words contains the inflectional suffix -er? Her, writer, infer, happier, rainwater, pager, or steer? The student will segment the target word into individual phonemes using tokens to represent each sound. The child matches each single sound to an individual sound box on the grid. Then the child writes each sound token's corresponding grapheme (letter(s)) in each sound box on the PGM grid. When the child is finished, the number of boxes utilized on the grid should match the number of phonemes (sounds) in the word and its original spelling should be preserved.

Teaching Vocabulary and Morphological Awareness with Inflectional Suffixes

To teach inflectional suffixes effectively, students must learn the concept of morphemes and the distinctions between base words, roots, suffixes. During spelling instruction, teachers lead students in discussions about the

Key Terminology for Teaching Inflectional Suffixes					
Term	Definition	Examples			
Morpheme The smallest meaningful units of language (including inflectional suffixes) Morphemes can be one syllable, multiple syllables, or an entire word. The number of morphemes and the number of syllables do not always match.		Prefixes: un-, pre-, anti- Suffixes: -s, -est, -able Roots: rupt, spect, auto Base words: clean, form, walk Multi-morpheme word: in-spect-ed (3 morphemes, 3 syllables) * re -ject-s (3 morphemes, 2 syllables) * teach-er-s (3 morphemes, 2 syllables)			
Base Word	The simplest form of a word whose meaning can stand alone				
Root	A morpheme usually cannot stand alone, but is used to form a family of words with related meanings. The root <i>rupt</i> means to break or burst and forms related words such as <i>erupt</i> , <i>rupt</i> means.				
Schwa	An unexpected vowel sound in an unstressed syllable, usually resulting in the sounds /ŭ/ or /ĭ/. Any vowel pattern can be a schwa. A schwa is represented by the symbol a.				
Affix	A term used to describe any prefix or suffix attached (affixed) to a base word or root	Prefixes (before the root or base word): pre-, mis-, contra- Suffixes (after the root or base word): -er, -ing, - ed, -ion, -ive			
Suffix	A letter or letters added to a base word that can change the part of speech	clean + -s = cleans clean + -er = cleaner clean + -ed = cleaned			
Inflectional Suffix	A suffix that marks a word tense, number, possession or degree without changing its part of speech	-s, -'s, -es, -ing, -ed, -en, -er, -est			
Derivational Suffix	Added to a base word or root to build a new word, changing its meaning, part of speech, or both.	act + -ion = action (verb to noun) dry + -ness = dryness (adjective to noun) fear + -ful = fearful (verb to adjective) self- + -ish = selfish (noun to adjective)			
Derivative	A word formed from another base word or root by adding prefixes and/or suffixes	Derivatives of the root spect: respect, inspecto unexpected, prospective			

use, form, and sound structure of each inflectional suffix. This helps prime their understanding of inflectional suffixes, notice their various uses and forms, and become attuned to the sounds they make. After multiple exposures and practice, students can quickly hear differences in such words as **hike** and **hiked** or Joe and Joe's. The English language contains more derivational suffixes than inflectional suffixes. However, four inflectional suffixes (-s, -es, ed, -ing) were found in about 65% of 2,000 commonly suffixed words (White, Sowell, and Yanagihara, 1989).

Inflectional Suffixes

Teaching inflectional suffixes helps all students learn to decode, spell, and comprehend print. For some students, this direct, systematic instruction, particularly in the early grades, is critical. For example, students with hearing loss may have difficulty recognizing suffixes in oral language. English Language Learners may not have similar inflectional suffixes in their first language and thus need to learn their purposes, meanings, and varied pronunciations (such as the 3 sounds of *-ed*). Speakers of African American English, a dialect that frequently drops final consonants, benefit from explicit instruction in suffixes that may be less commonly or consistently pronounced. Struggling readers and students with dyslexia or other reading disabilities also benefit from explicit instruction of suffixes as they can struggle with the subtleties of phonology and orthography (Washington & Seidenberg, 2021). The chart below provides an overview of inflectional suffixes. It describes their function, provides key vocabulary that should be explicitly specifically taught, and provides the sound variations that can occur.

Inflectional Suffix	Function(s)	Student Definition(s) and Keyword	Sounds and Situations	
-5	Two Uses Pluralizes a noun without adding a syllable: hand, hands Indicates present tense of a verb: John walks.	Plural = more than one Present tense = action taking place now	Situation: -s says /s/ When a base word ends in an unvoiced sound, such as pups, talks Situation: -s says /z/ when a base word ends in a voiced sound such as dogs, runs	
-es	Two Uses: This suffix is a variation of -s. Pluralizes a noun and adds a syllable: dresses, fixes, lunches Indicates present tense of a verb Sue dresses a doll.	Plural = more than one. Present tense = The action is taking place now.	Situation: -es says /ə/ /s/ when a base word ends in: • x = /ks/ boxes, fixes • s = /s/ glasses, hisses • ch = /ch/ churches, hunches • sh, ch = /sh/ dishes, mustaches • ge, dge = /j/ stages, ledges • z = /z/ fizzes, buzzes	
's and s'	's: Shows possession or ownership for singular nouns and irregular plural nouns: Pat's hat, mice's nest, men's room s': Shows possession or ownership for regular plural nouns The kittens' mother was sleeping.	The noun has the possession of the next word: Bob's house is red. The bird's nest fell.	Situation: -'s/-s' say /s/ or /a/ /s/ when the base word ends in an unvoiced sound: Matt's, Alex's Situation: -'s/-s" say /z/ or /a/ /z/ when the base word ends in a voiced sound: a mom's hat the judges' robes	
-ing	 Creates a present participle verb <i>The child is walking home</i>. Creates a gerund that is derived from the verb but functions as a noun without significantly changing the part of speech <i>Walking is healthy for you</i>. 	 The inflectional suffix -ing shows an action that is happening now. A gerund is derived from the verb but functions as a noun. 	/i/ /ng/	
-ed	Creates a past tense verb They planted the garden. She flipped the coin. The bee buzzed loudly.	The action happened in the past.	Situation: - ed says fif /d/ when the base word ends in /t/ or /d/= planted, ended Situation: - ed says /t/ when the base word ends in an unvoiced sound. flipped Situation: - ed says /d/ when the base word ends in a voiced sound. Pulled	
-er	 A comparative suffix added to the end of an adjective A dog is bigger than a cat. 	More than: longer, faster, sharper	/er/	
-est	A superlative suffix added to the end of an adjective The red hat is smallest.	The most: sweetest, cheapest, oldest	[i] s t	
-en	Indicates the past participle form of some verbs and is used with helping verbs: is, are, were, etc. She had taken her wallet. Indicates an adjective without significantly changing the part of speech The golden ring is beautiful. The wooden chair is broken.	A past participle is a form of the verb that cannot be used without a helping verb such as is, am, are, was, were, had, have, has, etc. An adjective is a describing word. Adding—en doesn't drastically change the core meaning of the word or its part of speech.	/ə/ / /n/	

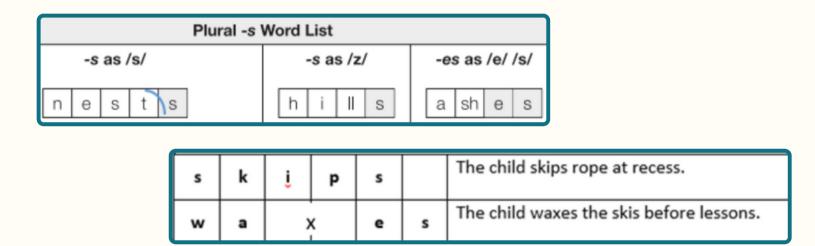
Mapping Inflectional Suffixes: Plural -s/-es and Present Verb Tense -s/-es

Plural inflectional suffixes should be mapped as follows:

- The single phonemes /s/ and /z/ should be represented by placing the s in a single box.
- The phonemes /e/ and /s/ should be represented by two separate boxes since they add two additional sounds, one of which is a vowel. This vowel sound adds an additional syllable to the word.

When the base word is a closed syllable that ends in *t*, this ending sound is often disguised in oral speech so it can be difficult for students to isolate. For example, you can clearly hear the final /t/ in *nest*, but when it is coarticulated with the plural /s/ (*nests*), the /t/ seems to disappear. Thus, young children will often leave off the letter *t* in their spellings. To avoid this error, teach students the concept of a base word early. If they say and spell the base word before adding the plural -s, this error is often avoided (Grace, 2006, 2022). During the mapping phase of these words, students should include the final consonant in its own box, even though it may be difficult to discriminate its sound once the plural -s is added. Instruct them to draw small, light, horizontal lines through the two boxes as shown below to demonstrate the letter's attempt to disguise its sound.

Present tense -s and -es are mapped according to the same rules as plural -s and -es as shown below:



Mapping the Inflectional Suffixes -ing and -en:

The inflectional suffixes -ing and -en give verbs their sense of time (tense), mood, or voice. A helping verb, such as am, is, are, has, was or had is placed before -ing and -en to ensure clarity by making it clear to the reader who is taking action in the sentence.

Examples: I <u>am</u> working. He <u>is</u> washing the car. We <u>are</u> doing math at 10 am today.

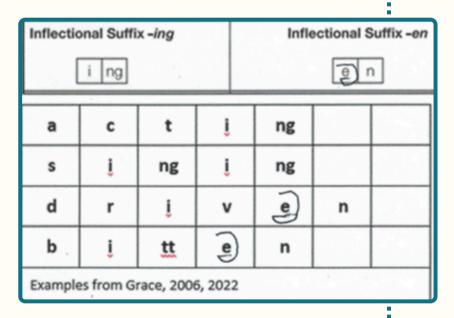
Past participles indicate actions completed in the past. In a regular verb, this tense is formed by adding the inflectional suffix -ed to a base word. However, there are many irregular verbs in English such as drive, eat, bite, break, speak, steal, take, weave, and write that become past participles by adding the inflectional suffix -en.

Examples: She <u>was</u> driven to school. The necklace <u>has</u> been stolen.

Since -ng is a digraph that makes one sound, it should be placed in one sound box on the Phoneme Grapheme MappingTM grid paper. The preceding short i /ĭ/ should be placed in a box of its own. Some phonics programs teach the suffix -ing as a welded sound.

However, this is incorrect since the suffix actually contains two sounds that are heard individually. The danger of teaching -ing as one welded sound is that children may misread words such as boing as "bo-ing" or bingo as "bing-o" (Grace, 2022).

The inflectional suffix -en has two phonemes and should be placed in two separate boxes. The vowel is a schwa (an unexpected vowel sound) so it should be wrapped with a schwa symbol as shown in the chart below. Students often confuse this suffix with the letter name n and may try to place both the e and n in one box, or omit the e entirely when they spell this suffix as in "brokn" and "takn" (Grace, 2006, 2022).



Mapping the Inflectional Suffix -ed

Before mapping -ed, students need instruction and practice isolating the base word from the three different ending sound(s) represented by the inflectional suffix -ed (/id/, /t/, /d/). Guided practice involves step-by-step instruction with teacher support. Also, In the beginning stages of decoding and encoding, first graders often spell the suffix -ed as they hear it. Since there are three possible sounds for -ed, it is not unusual to see these novice spelling attempts:

"wisht" for **wished** "plantid" for **planted**"pland" for **planned**

Students must learn that although they hear three different sounds for this inflectional suffix/morpheme, it has just one meaning and spelling conveyed by -ed and this suffix changes the word to past tense. Therefore, meaning and spelling should be married at this point in their instruction (Grace, 2006, 2022). Learning this specific suffix, which can sound so different from the spelling, can be an "ah-ha" moment for students. It is often the first time they recognize that a morpheme's spelling takes precedence over the phonemes heard.

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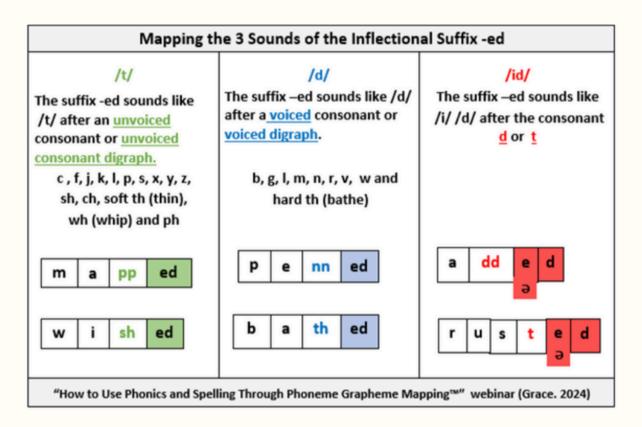
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When the suffix -ed comes after a base word that ends in an unvoiced consonant sound, it makes the single phoneme /t/. Therefore, both e and d should be placed in one box to represent the single sound of /t/ that -ed makes in these words.

When -ed comes after a base word that ends in a voiced consonant sound, it makes the single phoneme /d. Both e and d should be placed together in one box to represent the single sound of /d made in these words.

When -ed comes after a base word that ends in either d or t, we hear the two phonemes /e/ and /d/. Both e and d should be placed in two <u>separate boxes</u> to indicate their two individual sounds



Mapping the Inflectional Suffixes -er and -est

The inflectional suffix -er creates a comparative adjective that compares two people, places, things or ideas. Examples: My bedroom is neater than yours. Today is warmer than yesterday.

The inflectional suffix **-est** creates a superlative adjective used to describe an object which is at the upper or lower limit of a quality. Examples: **fastest/slowest highest/lowest lightest/darkest tallest/shortest**

Since the suffix -est has a schwa vowel sound, children often spell it the way it sounds "ist." It is helpful to have them associate the word best as a mnemonic with this suffix since its meaning and spelling of the suffix lie within it. For example, the fastest runner is the best at being fast. Since the short e is easier to hear in the word best, this analogy can help children spell this inflectional suffix correctly (Grace. 2006, 2022).

When a vowel letter is followed by the letter r, the vowel sound is different from either the long or short vowel sound. It is important to teach students that the r always comes after the vowel and helps to give the vowel its unique sound. The sound of /er/ has three different spellings (-er, -ir, -ur,and irregularly -ar (dollar) and -or (doctor). However, when used as a comparative inflectional suffix, it is spelled -er and carries the meaning of comparing people, places, things or ideas.

It is mapped as one sound, so its two-letter grapheme is placed in one sound box on the Phoneme Grapheme Mapping™ grid paper. Have students color the inflectional endings they are learning and write a sentence that explains the meaning.



The inflectional suffix **-est** is comprised of three individual phonemes and is represented by three different letters (e-s-t). Therefore, each letter is placed in a separate box. The **e** in the **-est** suffix is a schwa so it is marked accordingly.

	f	а	S	t	е	S	t	The child ran the fastest of the
ı					ə			group.

Teaching the Rules for Attaching Suffixes

Following an established scope and sequence, second through third-graders should be introduce to plurals, past tense and some spelling rules related to adding common inflectional suffixes. As in teaching syllable types or other phonics rules, it is helpful to focus on having children look for patterns in printed words instead of only reciting the rules and their exceptions (Reading Rockets, n.d.). There are six rules for attaching suffixes to base

	s	
Rule	Examples	
You add the suffix directly to the base word	cat + -s = cats love + -ly = lovely hope + -ful = hopeful	
When a base word ends in two consonants (or consonant sounds) just add the vowel suffix.	land + -ing = landing help + -ed = helped camp + -er = camper box + -es = boxes	
When a base word contains a vowel team, just add the vowel suffix.	neat + -er = neater sweet + -est = sweetest look + -ed = looked shout + -ing = shouting eat + -en = eaten	
When a base word has one syllable, one short vowel and one final consonant, you double the final consonant before adding the vowel suffix.	<u>big</u> + -est = biggest <u>ship</u> +-ed = shipped <u>trim</u> + -ing=trimming <u>thin</u> + -er = thinner	
5. When a base word ends in a silent e, drop the e before attaching the vowel suffix.	bake + -ed = baked hope + -ing = hoping tame + -est = taming wide + -en = widen	
6a. When a base word ends in a y that is preceded by a consonant, you change the y to an I before adding either a vowel or consonant suffix unless the suffix begins with an i.	dry + -ed = dried baby + -es = babies tiny + -est = tiniest busy + -er = busier fly + -ing = flying	
6b. When a base word ends in a y that is preceded by a vowel, keep the y before adding either a consonant or vowel suffix.	Lay + -ing = laying Enjoy + -ed = enjoyed obey + -s = obeys Gray + -er = grayer	
	1. You add the suffix directly to the base word 2. When a base word ends in two consonants (or consonant sounds) just add the vowel suffix. 3. When a base word contains a vowel team, just add the vowel suffix. 4. When a base word has one syllable, one short vowel and one final consonant, you double the final consonant before adding the vowel suffix. 5. When a base word ends in a silent e, drop the e before attaching the vowel suffix. 6a. When a base word ends in a y that is preceded by a consonant, you change the y to an I before adding either a vowel or consonant suffix unless the suffix begins with an j. 6b. When a base word ends in a y that is preceded by a vowel, keep the y before adding	

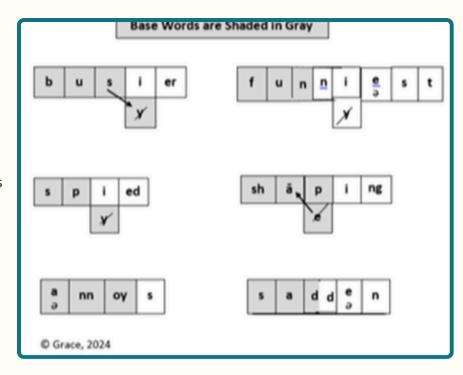
words or roots.
Each rule should
be explicitly
taught one at a
time and practiced
over an extended
period. Before
teaching these
rules, students
should understand
the two types of
suffixes.

Consonant suffixes begin with a consonant (-s, -ful, -less, -ly, -ness, -some, etc.), while **vowel** suffixes begin with a vowel (-ed, -ing, -er, -est, -y, etc). This chart outlines the rules appropriate for instruction in the primary grades for adding inflectional suffixes to base words.

Phoneme Grapheme Mapping™ can also be used to help children visualize the rules related to adding suffixes to base words, as demonstrated in the examples below.

For students who have made strong progress in phoneme-grapheme correspondence, the Affixo Chart (Grace, 2006, 2022) is a helpful next step in teaching morphology. Teachers in the classroom and during intervention services can use the chart to:

- Introduce a new affix (prefix or suffix).
- Practice the spelling rules associated with adding affixes to roots and bases.
- Reinforce phoneme-grapheme mapping procedures.
- Review spelling concepts with affixes.
- Provide independent spelling practice.
- Provide extended practice with difficult concepts.



			Affixo Chart			
			© Grace. 2006,2022			
Prefix	Prefix	Prefix	Base Word or Root	Suffix	Suffix	Suffix
			box	es		
		dis	pute	s		
		mis	tracé	ed		
		re	stagé	ing		
		un	happý (i)	est		
			crisp	y (i)	er	
		re	sharp	en	ing	
		pre	plan (n)	ing		
	pre	re	cord	s		
		de	port	ed		
		а	wake	en	ed	
	Tea	ching Rule	for Attaching Suffixes	(Grace. 2	024)	

Directions for Using The Affixo Chart

- 1. Provide the word to be analyzed. It may have one or multiple prefixes and/or suffixes.
- 2. Direct students to identify the base word or root and to write it in the middle column.
- 3. Work outward from the root/base, identifying suffixes and prefixes that are a part of the original word.
- 4. Write the affixes in the prefix and suffix boxes to build the word.
- 5. Note spelling changes by marking them as they were marked during phoneme-grapheme mapping.

Assessing Student Progress

Schools should adopt a scope and sequence for teaching morphology to improve students' reading, spelling, and vocabulary. Teachers can monitor progress using criterion-based curriculum-based assessments (CBMs), such as those found in Spellography™, which includes a spelling inventory aligned with its instructional sequence. Additionally, literacy teachers can observe students' learning during guided practice and use this

Some students will require repetitive practice to master the targeted morpheme, particularly in spelling. Diagnosing a student's spelling errors using authentic written text can indicate where the breakdown in their understanding of the morpheme is occurring.

information to help inform their lesson trajectories.

<u>Phonological</u>	<u>Orthographic</u>	<u>Morphological</u>
<u>Error</u>	<u>Error</u>	<u>Error</u>
Sound-based	Print-based	Meaning-based
h <u>r</u> d	<u>hrd</u> er	<u>heard</u> er

It can discern whether the error is phonological, orthographic, or morphological, as in the errors for the word *herder* below. Collecting student work in other subjects can also reveal if the targeted concepts are being independently transferred to classwork.

Reflection by Kathryn Grace

If you are a parent or teacher, you have likely seen children write "fallz" for *falls*; "wisht" for wished; pend for penned, plantid for planted; tallist for tallest or coldir for colder. Are these errors just the result of a weekly spelling list gone awry? Too often, a child's misspellings of these important suffixes are seen as spelling errors instead of morphological errors. This is why children need explicit instruction on inflectional suffixes that marry phonology, orthography and morphology (meaning) as exemplified in Phoneme Grapheme Mapping™ lessons.

<u>Inflection</u>, when speaking, can help you understand a person's mood, manner, or intent. In reading and writing, <u>inflectional</u> suffixes indicate a word's tense, number, possession or comparison that influences how a word is read and understood. Both communicate meaning.

Learning the pronunciation and spelling rules attached to inflectional suffixes can significantly improve literacy skills. To learn these rules, teachers need to help students pay close attention to the last letters of a base word since these contain important information about the word's meaning and spelling.

As shown through this article, inflectional endings play an essential role in structured language instruction. Understanding and mastering them help students decode and spell words more accurately and read, write and speak more fluently, thus greatly improving their reading, writing and comprehension skills.

Answer to this issue's Curious Question:

The answer is *happier*. *Happy* is the base word, an adjective. *Happier* is also an adjective. *The baby was happy* with the toy. The baby was *happier* with the toy. An inflectional suffix does not change part of speech.

In all the other words, the spelling *er* serves other purposes. *Her* is a pronoun and does not have a suffix. *Writer* indeed has an *-er* suffix, meaning "a person who," but this is a derivational suffix because it changes the part of speech from verb (*to write*) to noun. *Infer* has the prefix *in-* attached to the root *fer*, which means to bring or carry, and has no suffix. *Rainwater* is a compound word that does not have a suffix; the original two-syllable word *water* is nearly identical to its Old English origins (*wæter*). Similar to *writer*, *pager* has a derivational suffix, changing a verb (*to page*) to a noun. Like *water*, *steer* has no suffix and is similar to its Old English original (*stēor*).

References

Birsh, J. R., & Carreker, S. (2018). Multisensory teaching of basic language skills (5th ed.). Brookes.

Ehri, L. C. (2013). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading*, 18(1), 5-21. https://doi.org/10.1080/10888438.2013.819356

Grace, K. E. (2022). Phonics and spelling through phoneme-grapheme mapping. Really Great Reading.

Grace, K.E. (2024). How to use phonics and spelling through phoneme grapheme mapping. Webinar, Plainfield, Illinois School District.

Reading Rockets (n.d.). Classroom strategies: Elkonin boxes. https://www.readingrockets.org/classroom/classroom-strategies/elkonin-boxes

Reading Rockets (n.d.). Reading and writing basics: Spelling. https://www.readingrockets.org/reading-101/reading-and-writing-basics/spelling

Washington, J. A. and Seidenberg, M. S. (2021). Teaching reading to African American children: When home and school language differ. American Federation of Teachers. https://www.aft.org/ae/summer2021/washington_seidenberg

White, T. G., Sowell, J. and Yanagihara, A. (1989). Teaching elementary students to use word-part clues. *The Reading Teacher*, 42(4), 302-308. https://www.istor.org/stable/20200115

Assessment Resources

Acadience Reading, Gr. K-6 and 7-8. Acadience Learning. https://acadiencelearning.org/

DIBELS, 8th Edition. University of Oregon. https://dibels.uoregon.edu/materials/dibels

Spellography[™] 95 Percent Group. https://www.95percentgroup.com/spelling

Meet the Writers and Editors



Kathryn Grace, M. Ed, CAGS

Kathryn served as a classroom teacher, special educator, literacy coach, learning specialist, and language arts coordinator for over 40 years in Vermont's public schools. Ms. Grace was a professional developer for the Stern Center for Language and Learning and an adjunct professor at Trinity College. She is the proprietor of Learning Roots, an educational consulting, tutoring, and student advocacy business, and continues to offer literacy workshops and educational materials. First published in 1991, Really Great Reading will soon release the 4th edition of Ms. Grace's Phonics and Spelling through Phoneme-Grapheme Mapping. The recipient of numerous awards in education and active in the local community, she has lived in Waterbury for 46 years.

Jennifer is a passionate Vermont educator specializing in structured literacy and dyslexia intervention. Her mission is to empower students to overcome learning barriers and thrive academically. She holds a Bachelor's in English Literature from Averett University and a Master's in the Art of Teaching - Dyslexia Specialist from Colorado College.

As a Certified Academic Language Therapist (CALT) and Structured Literacy Dyslexia Specialist (SLDS), Jennifer supports students with dyslexia, dysgraphia, and dyscalculia. She began as a licensed secondary English teacher (grades 7-12) before shifting her focus to dyslexia therapy, inspired by her daughter's learning challenges. Jennifer played a key role in establishing one of Colorado Springs's first public schools for dyslexic students and founded an online practice serving students in Canada, California, and Colorado.



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Dorinne has served as a teacher and principal for nearly 30 years in Vermont schools. After completing her undergraduate studies at Goddard College, she earned her Master's and Doctorate in Educational Leadership at the University of Vermont. As a postdoctoral Fulbright Scholar, she taught at the Technical University of Berlin and conducted research on democratic education in Germany. Since completing an Education Specialist Degree in Reading and Literacy Instruction at Bay Path University, Dr. Dorfman teaches evidence-based literacy at Barre Town Middle School.



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