



TEACHING READING IN BRIEF

ORTHOGRAPHY AND MORPHOLOGY

VOL. 3, NO. 3

SEEKING VERMONT WRITERS!

For the 2025-26 issues of *Teaching Reading in Brief*

We are seeking Vermont educators willing to share their expertise by writing an article for our newsletter. We thank all of you who have proposed ideas and/or volunteered to write since we began this project a year ago. There is still ample opportunity for others to write on related topics for the next school year and beyond. With your help, we can continue to amplify the voices of Vermonters who have embraced reading science to improve student reading and writing.

Our topics for 2025-26 include:

Vol. 4: Assessment

1. Assessment for Improving Student Reading Assessment Essentials*
2. Assessing PA, decoding, and encoding*
3. Assessing vocabulary, comprehension, and writing*
4. Spelling error analysis to inform instruction*

Vol. 5 Building Fluency

1. Oral Reading Fluency (ORF) subcomponents and impacts
2. ORF development, monitoring, and intervention*

Vol. 6 Oral Language and Reading Comprehension

1. Oral language development
2. Building background knowledge
3. Teaching vocabulary and semantics
4. Teaching sentence structures
5. Verbal reasoning and literacy knowledge
6. Inferencing*
7. Phrase structure *
8. Affective features of reading comprehension*

*Topics with an asterisk have an identified writer.

Vol. 7: Writing Instruction for All Students

1. From handwriting to keyboarding
2. Writing to learn: Note taking, paraphrasing, summarizing
3. Microstructure: Syntax and sentence writing*
4. Macrostructure: Organization, text structure, coherence

Vol. 8: Vermont Voices on the Transition to Evidence-based Structured Literacy

1. An elementary teacher's perspective
2. A secondary teacher's perspective
3. A literacy coach's perspective
4. A special educator's perspective
5. A reading specialist's perspective
6. An administrator's perspective
7. A higher-education perspective

Teaching Suffix Spelling Rules

By Amy Ducey, M.Ed., Fellow/OGA

This article will address the following questions:

1. How does morphology instruction improve reading and writing?
2. What are the prerequisite skills students need before teaching suffix spelling rules?
3. What are the spelling rules for adding suffixes?

1. How does morphology instruction improve reading and writing?

Morph is a Greek root that means **form** or **shape**, and **-ology** is also Greek, meaning **the study of**.

Morphology, then, is the study of meaningful units or morphemes in words. A morpheme is the smallest

Curious Question: What are some examples of words that are exceptions to the e-drop suffix spelling rule?

unit of meaning in a word, and includes prefixes, suffixes, base words, and roots. As students' reading, spelling, and writing skills advance, they inevitably encounter more complex, multisyllabic words. Segmenting words into their morphemes helps to improve reading and spelling accuracy. Understanding morphemes also broadens students' vocabulary (Bowers, Kirby & Deacon, 2010).

"In the upper elementary grades, many words in text are multisyllabic and often contain Latin and Greek parts. Thus, additional strategies must be taught to those students who have not acquired an automatic level of word recognition for longer words" (Henry, 2010, p. 17). Direct instruction in suffix spelling rules will help students of any age unlock the ability to read and spell many common words with suffixes. These suffix spelling rules are generally reliable and help students read and spell thousands of words.

2. What are the prerequisite skills students need before teaching suffix spelling rules?

Students need to be taught several important prerequisite skills before learning English suffix spelling rules. In my experience mentoring and coaching teachers across the state of Vermont, typically developing readers in third grade, who have been systematically taught using the Orton-Gillingham Approach or Structured Literacy, are ready to begin learning suffix spelling rules.

Regardless of grade level, here is a list of five prerequisite skills to consider:

1. Automatically differentiate between letters that are vowels and consonants.
2. Read and spell words containing several syllable types, at a minimum including closed VC syllables (**mop**, **scrap**), silent-e VCe syllables (**mope**, **scrape**), and open V syllables (**me**, **so**).
3. Understand the concept of base words and suffixes. A **base word** is a word that can stand alone or holds meaning all by itself, such as **run**, **dog**, **table**, in contrast with a Greek or Latin **root** (**vis**, **ject**, **geo**), which must attach to other morphemes (prefixes, suffixes, roots) to become a word.
4. Read and spell a variety of words with common suffixes, such as **-s**, **-es**, **-ed**, **-ing**, **-er**, **-est**, **-less**, **-ful**, **-y**, **-ly**. When students are initially taught to read and spell words with suffixes, it is helpful for them to practice reading and spelling words with no change to the base word's spelling (**jumped**, **quickly**).

Before teaching any suffix spelling rules, ensure students can differentiate between **vowel suffixes**, which are suffixes that begin with a vowel (**-ed**, **-ing**, **-y**, **-ish**, **-ive**, **-able**). Vowel suffixes are contrasted with **consonant suffixes**, which are suffixes that begin with a consonant (**-s**, **-ful**, **-less**, **-ly**, **-ness**, **-ment**). See table on the next page.

A teacher can provide students with practice sorting suffixes into two piles of vowel suffixes and consonant suffixes before the first suffix spelling rule is taught.

3. What are the spelling rules for adding suffixes?


The bulk of this article will explain suffix spelling rules, including some embedded links to brief videos, and teaching tips for each:

- A. [1-1-1 Doubling Rule](#)
- B. [E-Drop Rule](#)
- C. [Y-to-i Rule](#)
- D. 2-1-1 Advanced Doubling Rule

Examples of Vowel Suffixes	Examples of Consonant Suffixes
<ul style="list-style-type: none"> -ed -ing -es -er -est -ish -y -able -ive 	<ul style="list-style-type: none"> -s -ful -less -ness -ly -ment

A. Suffix Spelling Rule: 1-1-1 Doubling Rule

If the base word is a one-syllable word, has one vowel, and one final consonant, then double the final consonant before adding the vowel suffix.

<p>1-1-1 doubling rule</p> <ul style="list-style-type: none"> One syllable word? ✓ One vowel? ✓ One final consonant? ✓ Adding a vowel suffix? ✓ <p>Double the final consonant.</p>	<p>hop</p>  <p>hop + ing = hopping</p>
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Teaching Tips for 1-1-1 Doubling Rule

We often explain the 1-1-1 doubling rule through the following story, courtesy of Barbara Waterstradt, CS/OGA.

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When a word has a VC pattern (ends with one vowel, one consonant), the vowel is a short king or ruler. This short king needs two guards to protect it when a vowel suffix comes. Take the word **hop**. We must protect the **o** with two guards when the vowel suffix **-ing** is added, or the vowel will be forced to say its name /ō/ in **hoping**. Where can we find a second guard? We'll double the last letter in the word, which protects the vowel king: **hop + ing = hopping** (not **hoping**). See the photo of a creative, hands-on activity for teaching the concept of the vowel needing two guards.



This teaching activity was created by Barbara Waterstradt, CS/OGA, using a pocket chart, index cards, and popsicle sticks. The teacher provides a base word, **fit**, and a student chooses a card from a deck of suffixes. The students must decide if the vowel needs two guards, doubling the last letter in the base word if adding a vowel suffix.

In the initial acquisition phase of learning, students should be given opportunities to practice reading and spelling words that all follow the 1-1-1 doubling rule. This isolated reading and spelling practice is also known in OG circles as “keeping it pure” within the subsections of the OG lesson devoted to isolated word reading and spelling. The rationale is that the student is in the early acquisition phase of learning this suffix spelling rule, so providing too much cumulative review or mixed practice of previously taught skills in an introductory lesson creates an unnecessary [cognitive load](#).

















Cognitive Load Theory (Buettler, 2024; Sweller, 1988) refers to the limited amount of information our working memory can hold and manipulate at a time.

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Students need frequent practice and review opportunities to generalize these spelling rules into their own writing. Teach your students that we do not double the letters **w**, **x**, or **y** (e.g., **boxing**, **blowing**, **flying**). You may notice that in **blow** and **fly**, the letters **w** and **y** are producing (or part of a vowel team producing) a vowel sound, and are not used as consonants here.

Below is an example of an activity sheet a teacher might create for students first learning the 1-1-1 doubling rule. Notice how this suffix spelling rule applies to r-controlled syllables (**scar**), too, in addition to closed syllables.

Base Word + Suffix	1 Syllable?	1 Vowel?	Ends with 1 Consonant?	Vowel Suffix?	New Word
stop + -ing					stopping
thin + -er					thinner
scar + -ed					scarred
fur + -y					furry

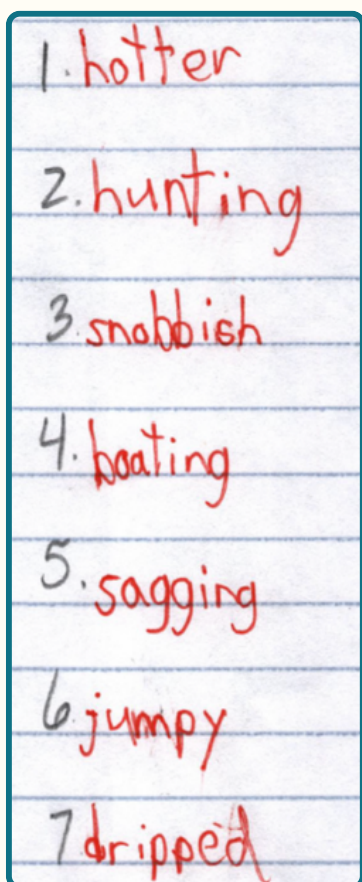
Once students have practiced the 1-1-1 doubling rule in isolation for both reading and spelling, then provide practice determining when the doubling rule does not apply (i.e., if the base word contains a vowel team or ends with two consonants, or a consonant suffix is being added). Never underestimate the power of asking students why. This simple little question requires students to use and build their critical thinking skills. For example, “Why don’t we double the final **p** in **shipment**?” It is like music to our teacher’s ears when we hear a student respond using logical reasoning by saying, “We don’t double the **p** because we are adding a consonant suffix (suffix **-ment** starts with **m**), not a vowel suffix.” Now your activity sheet can be more challenging, allowing students to practice when the 1-1-1 doubling rule applies or not.

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Base Word + Suffix	1 Syllable?	1 Vowel?	Ends with 1 Consonant?	Vowel Suffix?	New Word
bad + -ly	✓	✓	✓	✗	badly
big + -est	✓	✓	✓	✓	biggest
quick + -er	✓	✓	✗	✓	quicker

Here is a spelling sample from a student's Orton-Gillingham lesson reviewing when to apply or not apply the 1-1-1-1 doubling rule.



B. Suffix Spelling Rule: E-Drop Suffix Rule

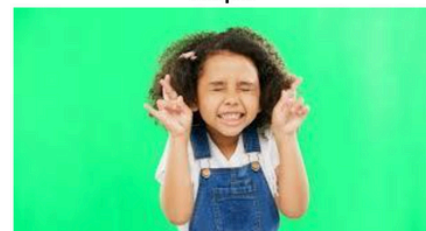
If the base word ends with *e*, drop the final *e* before adding the vowel suffix. Some scope and sequences teach the e-drop suffix rule soon after or before the 1-1-1 doubling rule.

e-drop rule

- Does the base word end in *e*? ✓
- Adding a vowel suffix? ✓

Drop the final *e*.

hope



hope + ing = hoping

Click [here](#) for another quick video overview on the Stern Center's YouTube channel.







Teaching Tips for E-Drop Rule

It will be important to teach students that the e-drop rule applies to any word ending in **e**, not just silent-e VCe words.

- Soft **c** and **g**: Many words end with **e** for soft **c** and **g** (words ending in **-ce** = /s/ and **-ge** = /j/) as in **singe** + **-ed** = **singed** and **ice** + **-y** = **icy**.
- Cle: Many words end with **e** as part of a consonant-l-e (**cle**) syllable type and syllable division pattern, as in **humble** + **-est** = **humblest** and **giggle** + **-ing** = **giggling**.
- Words ending in **-ve**: Words in English almost never end in **v** but **ve**, so **give** + **-er** = **giver** and **nerve** + **ous** = **nervous**.

This is another reason why we recommend waiting to teach these suffix spelling rules later in one's scope and sequence once the previously listed prerequisite skills are taught.

Below is an example of an activity sheet a teacher might create for students who are first learning the e-drop rule:





Base Word + Suffix	Ends with e ?	Vowel Suffix?	New Word
bike + -ing			biking
serve + -er			server
love + -ed			loved

Be sure to provide mixed practice with both suffix spelling rules. Here's another example of an activity that provides practice with both 1-1-1 and e-drop rules. A popular word reading activity we learned from Sheila Costello, ATF/OGA is called *What's the System?*

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This activity can be applied to any mixed practice lesson. Be sure to have a none column, so students have practice discussing when a suffix spelling rule does not apply. Don't forget to ask your students why, so they can explain their reasoning.

Base Word + Suffix	Double?	E-drop?	None?
striding			
reddish			
thinker			
spiteful			

C. y-to-i Suffix Rule

When the base word ends in **y**, and you add a suffix (either a consonant or vowel suffix), look at the letter before **y**. If the letter before **y** is a consonant, change the **y** to **i**, and add the suffix. If the letter before **y** is a vowel, don't change **y**; it is a vowel team as in **ay**, **ey**, **oy**.

When does y change to i?	
Change y to i if the letter before y is a consonant: <ul style="list-style-type: none"> try + -ing = tried fancy + -est = fanciest happy + -ness = happiness 	Do <u>not</u> change y to i if the letter before y is a vowel: <ul style="list-style-type: none"> play + -ful = playful destroy + -ed = destroyed pay + -ment = payment

Click [here](#) for a quick overview on the Stern Center's YouTube channel.

Teaching Tips for y-to-i Rule

The y-to-i suffix rule is typically taught later in a scope and sequence because it is complex. With any systematic instruction, before teaching a new skill, it is prudent to ask ourselves what skills our students will need to review before introducing a new one. Before introducing the y-to-i suffix rule, review **y** as a vowel. At the end of a word or syllable, **y** = /ī/ at the end of a one-syllable word (**fly**, **shy**) and **y** = /ē/ at the end of a multisyllabic word (**baby**, **candy**) and as a suffix (**rocky**, **dreamy**). Of course, we also recommend reviewing previously taught suffixes. Unlike the 1-1-1 doubling and e-drop rules, the y-to-i suffix rule is not contingent upon adding a vowel suffix.

Often, a little story can help students remember a particular spelling rule. In this case, we can tell our students letter **y** has “**i** envy” and really wants to be letter **i**. Letter **y** goes to the letter right before and asks, “Hey there, are you a consonant?” If the letter before **y** is a consonant, letter **y** jumps for joy! “Yay, now I can change to **i**!”

Once students have mastered the basic y-to-i rule, we can teach them when **y** changes to **i** for plurals. If there is a consonant before **y**, change y-to-i and add **-es** as in **lady** to **ladies**, **fly** to **flies**.

Exceptions to y-to-i Rule:

Suffixes **-ing** and **-ish**

Teach students that we do not change the y-to-i when adding the suffixes **-ing** and **-ish**; otherwise, words like **cry** + **ing** would be spelled “**criing**,” and **baby** + **ish** would be spelled “**babiish**.” We can teach our students that we almost never have a double **i** in English, so we can continue to use logical reasoning, albeit complex, to explain these exceptions. If you are fortunate to live in Vermont, there is one exception your students may be familiar with – the word **skiing** contains a double **i**. The base word, **ski**, originates from Norwegian, from the Old Norse word “skith”, which is why the word ends in **i**.

To reiterate, give students isolated practice reading and spelling words that change **y** to **i** before increasing the cognitive load by providing more cumulative review or mixed practice reading and spelling words that do and do not change y-to-i (**dried**, **drying**).

D. 2-1-1 Advanced Doubling Rule

Before you continue reading, do you remember the first suffix spelling rule? It was the 1-1-1 doubling rule, and there is an advanced variation of this suffix spelling rule we’ve saved for the end of this article because I would consider it the most cognitively complex of the suffix rules in English.

Struggling students will likely need frequent practice with these words (Gillingham & Stillman, 1997; Moats, 2005). Lastly, students can keep a record of learned irregular words in a notebook for quick reference (Gillingham & Stillman, 1997).

This is known as the 2-1-1 advanced doubling rule. If you are thinking about what should be reviewed in preparation for teaching this new rule, bravo! Not only do we think about providing mixed practice after a new skill is taught, but we also want to help our students connect new learning with previously taught information. If you were thinking that perhaps you should review the previously taught suffix spelling rules, you are right! You will also want to review previously taught prefixes, accenting, and schwa. (See Dr. Rosow's discussion on these topics in Teaching Reading in Brief, Vol. 2, No. 5.)

The 2-1-1 advanced doubling rule is like the 1-1-1 doubling rule, except that it applies to two-syllable words. If the first syllable in the multisyllabic word contains a prefix (often has a schwa, unaccented vowel sound), and the second syllable has one vowel followed by one final consonant, when you add a vowel suffix, double the last letter.

2:1:1 Advanced Doubling Rule

- Two-syllable word? ✓
- Does the first syllable contain a prefix or schwa? ✓
- Does the second syllable have:
 - One vowel? ✓
 - Followed by one final consonant? ✓
- Adding a vowel suffix? ✓

Then double the final consonant.



repel* + *ent* = *repellent

Note: Do not double if the first syllable is stressed or accented (*garden* - *gardening*). The 2-1-1 advanced doubling rule is not as reliable as the 1-1-1 doubling rule.

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Teaching Tips for 2-1-1 Advanced Doubling Rule

When you initially teach a new skill, provide isolated reading and spelling practice with only words containing the 2-1-1 advanced doubling rule. Only after students demonstrate mastery of the concept in isolation will you provide mixed practice, including words where the 2-1-1 advanced doubling rule does not apply.

Note how an activity sheet, like the sample below, includes having students explain why.

Prefix +base word	+	Suffix	=	New word	2-1-1 advanced doubling rule?	Don't double Explain why...
compel	+	-ing	=	compelling	Y	
equip	+	-ed	=	equipped	Y	
partner	+	-ing	=	partnering	N	The first syllable is stressed.
occur	+	-ence	=	occurrence	Y	
total	+	-ed	=	totaled	N	The first syllable is stressed.

Conclusion

There is often a false belief that once students know how to read, we focus solely on teaching reading comprehension, but morphology matters! First, reading comprehension is not a collection of isolated skills but a reflection of the reader's language comprehension and word recognition (check out [this interview](#) with reading researcher, Dr. Hugh Catts, to learn more). Second, morphology helps improve many literacy skills, such as word recognition, vocabulary, reading comprehension, spelling, and writing.

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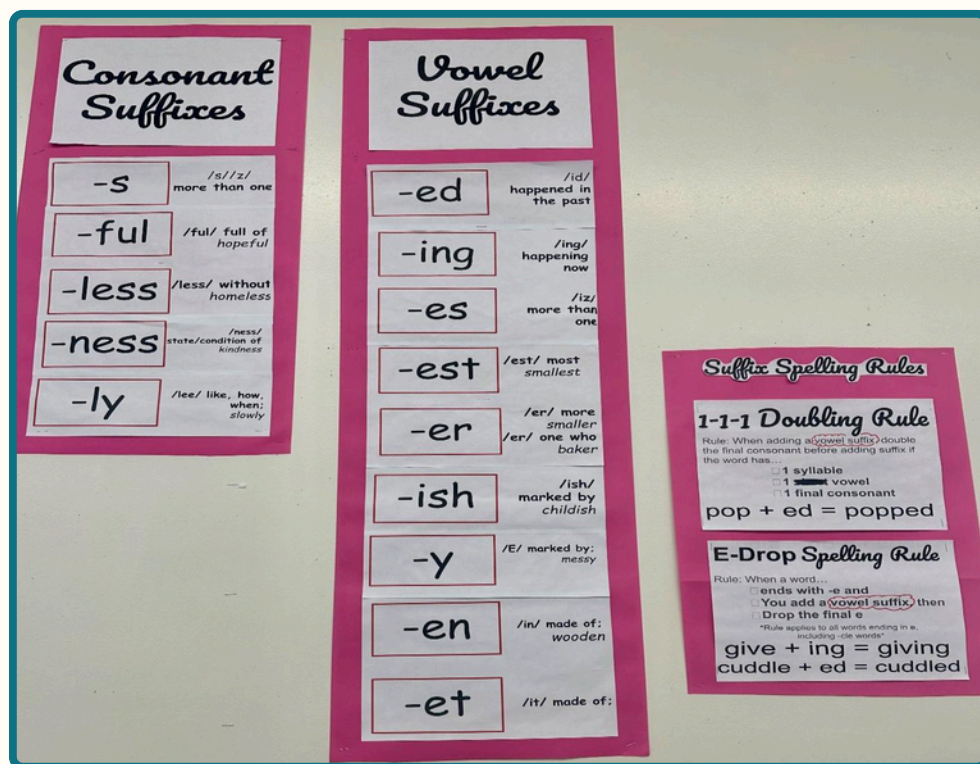
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Dr. Maryanne Wolfe, cognitive neuroscientist and author of several best-selling books, including *Proust and the Squid: The Story and Science of the Reading Brain* (2007), wrote: "Morphological knowledge is a wonderful dimension of the child's uncovering of 'what's in a word,' and one of the least exploited aids to fluent comprehension" (p. 130).

This is one of the reasons why we, at the Stern Center for Language and Learning, created an additional Orton-Gillingham course, *Introduction to Orton-Gillingham for the Upper Grades*, in 2021. We want general education teachers in grades 3-12 to understand the structure of English orthography and have a detailed yet flexible scope and sequence for teaching prefixes, suffixes, Greek, and Latin roots. Classroom teachers guide their students to become language scientists, exploring the meaning, word origin, and syllable structure of words. Pictured below is an example of a classroom bulletin board from Colleen Metzler, a fourth-grade teacher at Vergennes Union Elementary School. Colleen and her class slowly added to this list of consonant and vowel suffixes as they were learning the first two suffix spelling rules. Language scientists indeed!

Colleen shared:

The steps of the Orton-Gillingham lesson plan provide a framework for learning morphology and vocabulary that can feel daunting otherwise. My students don't believe me when I tell them that by the end of fourth grade, they will be able to read, write, and understand words with 4, 5, or 6 syllables!



Moving beyond basic phonics skills and teaching students about the structure and history of our beautiful English language gives them the best opportunities for enhancing both their academic and personal success.

Meet the Writer and Editors

Amy Ducey, M.Ed., F/OGA

Amy Ducey is the Assistant Director of the Stern Center Orton-Gillingham Institute and a Fellow of the prestigious Orton-Gillingham Academy. She teaches a wide range of Orton-Gillingham courses, workshops, and webinars, and mentors teachers toward all levels of Orton-Gillingham Academy certification. She has created curriculum and assessment materials, including being the lead author of *Orton-Gillingham for the K-2 Classroom: Weekly Guide and Universal Assessment (2nd Edition)*. Amy speaks regularly at national conferences about effective district-wide training and the importance of aligning classroom assessment and instruction. Amy was instrumental in adapting the Stern Center's Orton-Gillingham Institute to be a leader in online OG training. Amy has worked as a literacy coach, reading interventionist, and kindergarten teacher for over a decade. She also has extensive experience as an early education provider. Amy holds a Master's Degree in Education from Southern New Hampshire University. Her Bachelor's Degree is in Elementary Education from Johnson State College. Amy is passionate about helping teachers understand the importance of explicit, systematic, and sequential reading instruction. When she is not working, she spends her time rescuing dogs and horses in her not-so-empty nest.



Peggy Price, M.Ed., F/OGA

Peggy Price is the Director of the Stern Center Orton-Gillingham Institute, the only Orton-Gillingham Academy (OGA) accredited training program in Vermont. She leads a talented team of OGA Fellows and Clinical Supervisors who provide a wide range of courses and workshops, district-wide consulting, and in-depth mentoring for educators seeking OGA certification. Peggy has taught Orton-Gillingham to students ages 5 to 44 and finds joy in watching both students and educators grow as they learn the structure of English. She holds a Master's in Special Education from Georgia State University and a Bachelor's in Psychology from Binghamton University. Peggy believes every child has the right to read—and every teacher deserves the training to make that possible.



Dorinne Dorfman, Ed.S., Ed.D., OG/A

Dorinne Dorfman 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-aligned literacy at Barre Town Middle School.



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Answer to this issue's **Curious Question**:

If the final **e** in the base word is needed to maintain soft **c** (c = /s/) or soft **g** (g = /j/), you keep the final **e** when adding a vowel suffix. Examples include **noticeable, manageable, knowledgeable, courageous, outrageous**.

Watch out for the peculiar American spelling of **judgmental**! In an effort to simplify spelling early in our nation's history, in this word with the suffix **-ment**, the final **e** in the base word **judge** was dropped.