THE READING LEAGUE Vermont
Sharing knowledge, inspiring change.

TEACHING READING IN BRIEF

ORTHOGRAPHY AND MORPHOLOGY

VOL. 3, NO. 4

AUGUST 18, 2025

Dear Readers,

Welcome back to another year of ***Teaching Reading in Brief***! The purpose of this twice-monthly publication is to help prepare educators in the field with practical knowledge and skills to explicitly and systematically teach the five components of reading: phonemic awareness, phonics, fluency, vocabulary, and comprehension. The National Reading Panel first established these components in 2000, and dozens of states have since followed by enacting legislation to ensure evidence-aligned reading instruction. In 2024, with Vermont's passage of Act 139, these reading components for K-3 instruction and assessment are now required in both public and approved independent schools. Then, passed last June, Act 72 mandated public and approved independent schools to provide supplementary reading instruction to K-12 students reading significantly below grade level from "an appropriately trained education professional." Therefore, the recommendations Vermonters share in ***Teaching Reading in Brief*** will encompass both elementary and secondary levels.

We are so grateful to all our Vermont reading experts who wrote articles in our first year and to the Vermont authors who are working diligently to produce articles for our second year. Last year's articles are archived on our website: https://vt.thereadingleague.org/vermont-professional-resources/#TeachingReadinginBrief

This year's ***Teaching Reading in Brief*** will begin with the last three issues of ***Volume 3: Orthography and Morphology***. We will then publish an additional three volumes:

- **Volume 4: Assessment for Improving Student Reading**
- **Volume 5: Building Oral Reading Fluency**
- **Volume 6: Oral Language, Vocabulary and Reading Comprehension**

Additionally, throughout the year, we will intersperse articles called, *Vermont Voices from the Field*. PreK-12 and higher-education faculty and administrators will share their perspectives in implementing evidence-aligned literacy practices in their own classrooms, schoolwide, or university courses. If you are interested in writing an article as one of the Vermont voices, please email us at dorinnedorfman@gmail.com or brenda@vt.thereadingleague.org.

Have a great school year!

Brenda & Dorinne

From Simple to Complex: Prefixes and Chameleon Prefixes

By Lara Morales, M.A., CS/OGA

This article will address the following questions:

1. What is a prefix, and why is it important to explicitly teach prefixes?
2. What are effective ways to teach simple prefixes?
3. What are effective ways to teach complex prefixes?
4. What are some additional teaching resources?

Curious Question:
Which numerical prefix is derived from both Greek and Latin?

What is a prefix, and why is it important to explicitly teach prefixes?

This article focuses on teaching prefixes to support reading and writing development. First, let's define a few key terms to aid our discussion of prefixes.

Key Terms
A **morpheme** is a word part or the smallest unit of meaning in a word, and can be a prefix, suffix, base word, or root. For example, the word ***unrooted*** has three morphemes ***un- root -ed***.
A **base word** is a word that can stand alone or holds meaning all by itself, such as the words ***speak, tiger, quick***, in contrast with a Greek or Latin **root *(spect, bio),*** which must attach to other morphemes (prefixes, suffixes, roots) to become a word.
An **affix** is a morpheme that cannot stand alone, such as a prefix or suffix, and must attach to be part of a word, such as the prefixes ***dis-*** and ***re-*** and the suffixes -***ing*** and -***ous***.
A **prefix** is a word part or morpheme that comes *before* a base word or a root, such as in ***unlike*** or ***predict***.
A **suffix** is a word part or morpheme that comes *after* a base word or a root, such as in ***walked*** or ***mortal***.

A prefix can consist of a single letter or a group of letters. Although many prefixes are monosyllabic (***re-***, ***un-***), there are several that contain two syllables (***anti-***, ***bene-***). A prefix carries meaning and changes the meaning or function of the word that it attaches to (Gillingham & Stillman, 1997). Approximately 25% of all prefixes in English are derived from Latin (Rasinski et al., 2008). There are also Anglo-Saxon and Greek-derived prefixes in the English language, all of which will be discussed later in this article.

Students who develop their knowledge of morphology strengthen their single-word decoding and comprehension skills, expand their written vocabulary, and enhance their understanding of connected text. Learning morphemes has a synergistic effect: students who can analyze and understand word parts can build their vocabulary more efficiently than those who rely solely on memorizing each unique word (Farrell & Matthews, 2010).

Students can be taught prefixes once they have mastered basic phonemic awareness skills and letter-sound correspondence, as each prefix comprises individual phonemes or speech sounds. Teachers should explicitly teach each prefix's spelling, pronunciation, and meaning. It is important to convey to students that prefixes and suffixes can often have an unclear vowel sound, or schwa sound, in the unstressed syllable of a word. For example, we may say "pruh-fer" instead of "pree-fer." For this reason, students should learn each prefix as a unit of meaning with a specific spelling pattern.

What are some simple prefixes and teaching tips?

As with other areas of Structured Literacy, such as teaching phonemic awareness and phoneme-grapheme correspondence, morphology instruction should progress from more common to less common suffixes and prefixes. There are different approaches that a teacher may choose for prefix instruction, depending on the developmental level and cognitive profile of their students.

For example, a primary level teacher may begin with four common prefixes: ***un-***, ***dis-***, ***in-*** and ***non-*** as in the words ***undo***, ***disagree***, ***insane***, and ***nonfat***. These prefixes can be categorized as negative prefixes because of a shared connotation meaning not, opposite, or absence. These four prefixes are also all closed syllables, containing a short vowel sound. Additionally, these prefixes can be attached to base words without modifying their spelling, making them more suitable for developing readers. In short, these four prefixes share a similar meaning and are easy to decode and spell.

Prefixes can be categorized into negative (discussed above), directional, and intensifying prefixes (Rasinski et al., 2008).

	Directional Prefix	**Negative Prefix**	**Intensifying Prefix**
Definition	Indicate a path or direction of some kind	Indicate not, opposite, or absence	Add emphasis or magnitude
Example Prefixes	**com** = with, together, *combine* **ex** = out, *exhale* **in** = in, *inhale* **sub** = under, below, *submarine* **de** = down, *descend* **pro** = forward, projectile	**un** = *unhappy* **dis** = *dishonest* **in** = *inactive* **non** = *nonstop* **mis** = *misinform*	**super** = *superhuman* **ultra** = *ultramodern* **hyper** = *hyperaware* **over** = *overachiever* **mega** = *megastar*

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Introducing Prefixes: Part to Whole

When the teacher introduces a new prefix, students can create a card for each prefix for a quick warm-up review and maintain a list of prefixes in each student's language notebook and class anchor chart. This running list of prefixes should include:

1. The prefix
2. Keyword that includes the prefix
3. Definition of the prefix
4. Possibly a picture relating to the keyword

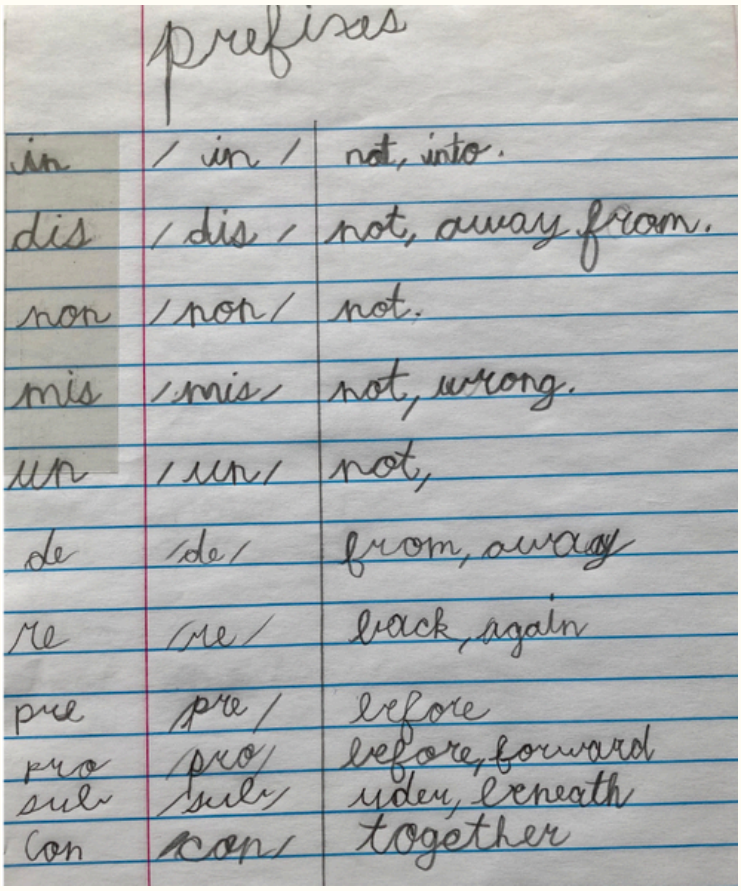


Photo courtesy of Lara Morales

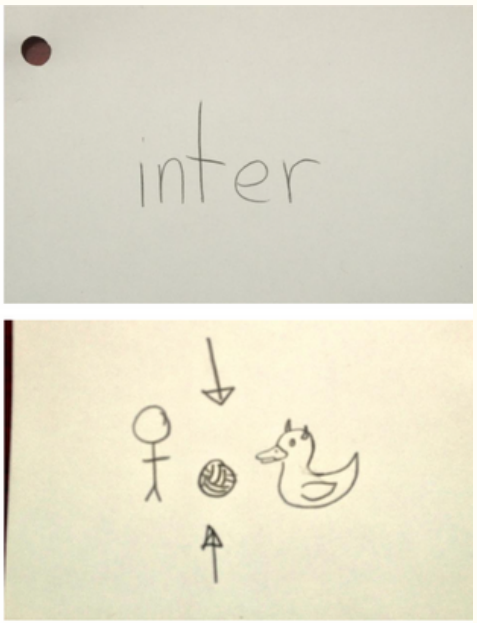


Photo courtesy of Peggy Price

In the above photo, to reinforce the meaning of each prefix introduced in the student's Orton-Gillingham lesson, this high-school student drew a simple illustration on the back of each morpheme card. The front of each card displays the prefix, while the back features an image that represents its meaning. In this example, we see ***inter***- meaning between, as in ***intercept***, ***interrupt***, or ***intermission***.

The Gillingham Manual recommends a multisensory, hands-on approach to introducing prefixes, allowing students to construct words with prefixes and base words (Gillingham & Stillman, 1997). One method for having students practice constructing words is to organize a file folder into three sections (prefix, base word, and new word), which includes sticky notes with previously taught affixes and various base words. The students can then build a variety of words and discuss the meanings of their new words.

You can watch this brief video explaining this activity from the Stern Center's YouTube channel.

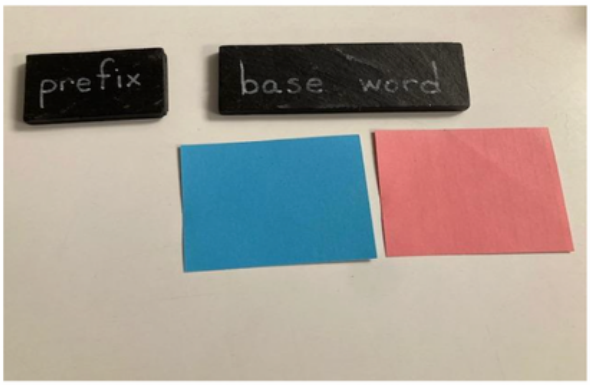
Photo courtesy of Peggy Price

Reading Words with Prefixes: Whole to Part

It is important for developing readers to practice decoding whole words that include prefixes, not just constructing them from separate prefix and base word cards. Struggling readers often benefit from additional practice reading and spelling words both in isolation and in connected text to build accuracy and automaticity. For decoding practice with prefixes, students should be taught to box, highlight, underline, or circle the prefix before identifying the base word to support accurate word reading. They read the prefix, then the base word, and blend the parts to read the full word (e.g., 'non,' 'stick'—'nonstick'). Just as importantly, students should also discuss the meaning of the prefix and how it contributes to the meaning of the entire word.

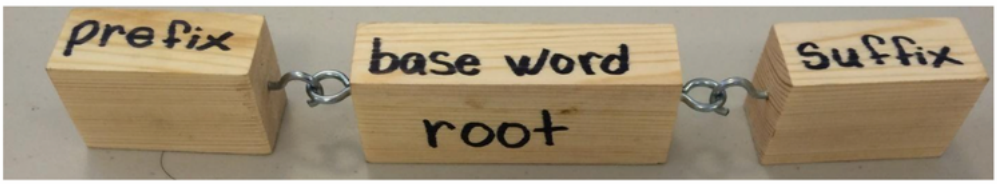
Spelling Words with Prefixes

When learning to spell words with prefixes, students benefit from visual support. For example, students can be taught to use a prefix tile or card to divide a word into its morphemes.



Prefix and base word tiles created by Lara Morales

In my Orton-Gillingham lessons, I teach my students to spell words in isolation using a spelling procedure called Simultaneous Oral Spelling (SOS), which teaches students to break multisyllabic words apart into their morphemes or syllables (Gillingham & Stillman, 1997). There are different variations of SOS, but I will share the procedure I learned from the Stern Center Orton-Gillingham Institute, which I have found especially effective for teaching morphemes.



Wooden block design originated by Sheila Costello

Example: SOS with the word *subway*

1. **The teacher says the word:** "Subway."
2. **The student repeats the word:** "Subway."
3. **The student segments the word into morphemes:** They touch the prefix tile and say "sub," then touch the base word tile and say "way."
4. **The student spells the prefix:** Students touch the prefix tile for "sub" and orally spell "s-u-b", writing each letter as they say it.
5. **The student spells the base word:** They touch the base word tile for "way" and either segment the sounds (/w/ /ā/) or immediately spell the letters "w-a-y," depending on their skill level.
6. **The student writes the base word:** Saying each letter aloud as they write.
7. **The student reads the entire word** as one unit, "subway."

At first glance, this process might seem complex. However, SOS begins with simple, one-syllable words that focus on phoneme segmentation and sound-to-letter mapping. By the time students encounter prefixes, they have usually mastered spelling two-syllable words (such as VCCV words like ***dentist*** or ***cupcake***), as well as base words with suffixes. Adding prefixes is a natural next step. In my experience as a teacher, the materials don't need to be fancy— sticky notes or index cards labeled ***prefix***, ***base word***, or ***suffix*** work just as well as wooden tiles or blocks.

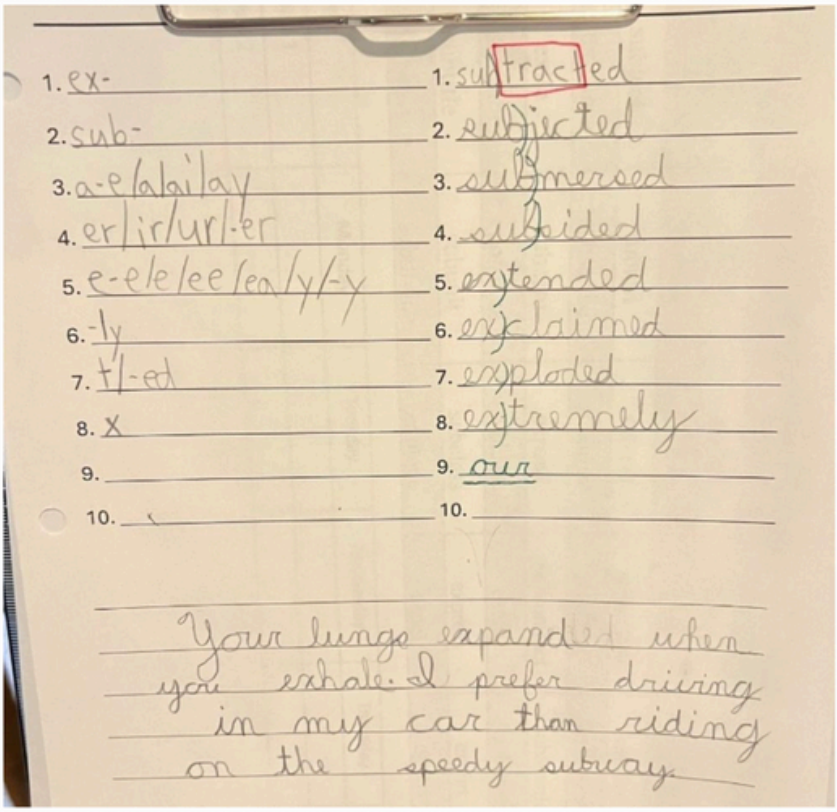


Photo courtesy of Sandy Flemer

The above photo shows the encoding section of an OG lesson for a fifth grader, focusing on the prefixes ***ex***- and ***sub***-. The two columns in the above photo represent two different encoding activities from the OG lesson. The left-hand column represents the Auditory Drill of the OG

lesson, and the right-hand column represents Simultaneous Oral Spelling (SOS) section described earlier in this article. The sentences beginning with "Your lungs expand…" represent the Sentence Dictation portion of the OG lesson. Please note that this student has already learned suffix spelling rules, such as the e-drop rule, discussed in the previous article by Amy Ducey (e.g., ***subsided, submersed, exploded, driving, riding***). The student is also prompted when to use a vowel team (i.e., ***exclaimed***) to avoid confusion with long vowel spelling options.

Directional Suffixes: Latin and Anglo-Saxon Derivations

Once students can read, spell, and use simple negative prefixes with a variety of base words, the teacher can introduce more directional prefixes (which also include some of the previously taught negative affixes). Directional prefixes are the most common type of prefix encountered by students in their academic texts (Rasinski et al., 2008). The more prevalent Latin prefixes ***dis-***, ***in-***, ***con-***, ***ex-***, ***sub-***, ***re-***, ***pre-***, and ***de-*** can be taught first before introducing less common ones (such as ***anti- en-***, ***mid-***, and ***trans-***), and before teaching two-syllable prefixes, such as ***inter-***. Flexibility is key, and a teacher might teach some directional prefixes before negative prefixes, depending on the student.

Below are examples of common Latin and Anglo-Saxon from the Stern Center Orton-Gillingham Institute Scope and Sequence for Intervention, adapted from Shirley Bate, F/OGA.

Latin Prefix	Meaning	Keyword
dis-	apart	dismiss, disperse
in-	into, onto	inside, inlay
con-	with, together	connect
ex-	out	exit
sub-	under, below	submarine
re-	back, again	reverse
pre-	before	prefix
de-	down, off	descend
pro-	ahead, forward	promote, project
ad-	to, toward	advance

Anglo-Saxon Prefix	Meaning	Keyword
a-	in, on, at	around
fore-	before	foretell
under-	too little, below	underfed, underground
over-	too much, above	overeat, overhead
out-	beyond	outgrow
be-	by, much, and other definitions	beside, beloved
off-	from	offshoot

What are some complex prefixes and teaching tips?

Numerical and Quantity Prefixes

When students have mastered reading and writing more common (negative and directional) prefixes, they are ready for instruction with more advanced prefixes. There are many Latin and Greek prefixes that students will encounter in academic subjects, such as math, geography, and science. The Latin prefixes *uni-* (one), ***bi-*** (two), ***tri-*** (three), and ***quadri/tetra-*** (four) indicate numbers, while Greek prefixes ***micro-*** (small), ***macro-*** (large), and ***mega-*** (great) indicate size. Below is a short list of Greek prefixes.

Greek Prefix	Meaning	Keyword
mono-	one	monocular
mega-	large, 1,000	megabyte
syn-	with, together	synonym
hyper-	over, excessive	hyperactive
hydro-	water	hydropower
tele-	distant	telegraph
auto-	self	automatic

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Assimilated or Chameleon Prefixes

An assimilated prefix, also called a chameleon prefix, has a spelling that has been modified for ease of pronunciation. Latin and Greek prefixes that contain a final consonant may change this consonant to promote euphony, or ease of pronunciation that is pleasing to the ear (Gillingham & Stillman, 1997; Rasinski et al., 2008).

For example, what would you call something that is not legal? The negative prefix ***in***- means not, so let's say ***inlegal***. However, adding the prefix ***in***- to the word *legal* creates a challenge for word pronunciation. Try saying ***inlegal*** five times fast. Did you end up saying ***illegal*** instead of ***inlegal***? You just experienced euphony. The final consonant ***n*** of ***in***- is changed to match the first letter of the base word ***legal***, for improved elocution. The word ***illegal*** is easier to pronounce and more pleasant sounding than if the prefix were simply attached to the base word in its original form, ***inlegal***. Just like a chameleon changes its colors to match its surroundings, a chameleon (or assimilated) prefix changes the last letter in the prefix to match the first sound in the base word.

Students who can analyze and divide words into their morphological parts will be more successful with spelling words with double consonants and understanding the word's meaning. See the table below.

Chameleon or Assimilated Prefixes

Original Prefix	in-	con-	sub-	ad-	ob-	dis-
Meaning	Not, in	Together, with	Under, from below	To, toward	Up against	Not, apart, different directions
Example Words	illegible, irregular, immature	collide, correct, commute	supplant, suffocate, success, suggest	accurate affirm, alleviate, appendix, arrogant, attract, aggravate	oppose, offend, occur	difficult, diffuse

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Teachers should explicitly teach chameleon prefixes and how to correctly change the prefix depending on the base word. Instruction should focus on one group or family of words at a time, with the most common form of the prefix presented first. For example, *in-*, would be taught first, and then with ***im-*** *(**immortal**)*, ***ir-*** *(**irrational**)*, and ***il-*** (***illegible***). After students become skilled in reading and spelling words with ***in-***, and can explain the prefix's meaning in the context of the word as either 'not' or 'into,' then students can learn how to read and spell the variations, one form at a time. For a culminating or review activity, students can practice sorting words after first boxing off or underlining the prefix and then sorting them under the correct original prefix. Don't forget to also practice spelling words using the SOS procedure explained earlier in the article.

Explicit instruction in prefixes supports the development of students' active vocabulary—the words they know well enough to use in speaking and writing (Rasinski et al., 2008). Learning about prefixes also enhances reading fluency, comprehension, and access to content-specific vocabulary. When students feel more confident spelling complex words, including those with chameleon prefixes, they are more likely to use them in their writing. We never want spelling difficulties to hinder a student's ability to express their ideas in writing. In sum, prefix instruction is a significant part of morphology instruction.

What are some additional teaching resources?

In addition to the other resources mentioned in this article, the website Membean (membean.com/roots) has a multitude of affixes and roots for students to explore in several ways. One engaging feature on Membean titled Word Root of the Day, includes a story that spotlights an affix (or root) and includes the many words that are created with that morpheme that students can listen to while they are reading. For example, the story "Ab-, Ab-, and Away!" is an entertaining tale that includes the words ***abnormal, absent, absolutely, abducted***, ***absorbing, abrasive***, and ***aberrant*** to teach students that the prefix ab- means "away." This site also includes lists of words and definitions that are organized by affixes, roots, and root trees.

Books and resources you might find helpful for lesson planning include:

Henry, M. (2010). *Unlocking literacy: Effective decoding & spelling instruction.* Brookes. https://products.brookespublishing.com/Unlocking-Literacy-P410.aspx

Hickey Gold, D., Russo, E., Wallace, L., & Shapiro, J. (2016). *PS: Prefixes, suffixes, roots.* W.V.C.Ed. https://www.wvced.com/product/ps-prefixes-suffixes-roots/

EPS Learning. (n.d.). *Megawords curricular and instructional materials.* https://www.epslearning.com/products/megawords

Answer to this issue's Curious Question:

Tri- means three, as in ***triangle, trio, triple, tricycle, and triathlon.***

References

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Rasinski, T., Padak, N., Newton, R. M., & Newton, E. (2008). *Greek and Latin roots: Keys to building vocabulary*. Teacher Created Materials.

No. 72. An act relating to miscellaneous amendments to education law, Sec. 10. 16 V.S.A. § 2903 Supplemental Reading Instruction.
https://legislature.vermont.gov/Documents/2026/Docs/ACTS/ACT072/ACT072%20As%20Enacted.pdf

Meet the Writer and Editors

Writer Lara Morales, M.A., CS/OGA

Lara Morales has been a public school teacher in Vermont for 29 years. She spent 20 of those years as a special educator, working with students from kindergarten through high school. In 2000, she began her training in Structured Literacy through the Wilson Reading System. Shortly after, upon transitioning to an elementary school role, she became trained in Fundations. Lara began her Orton-Gillingham training at the Stern Center in 2015 and has since earned both Associate and Certified Level certifications. She currently serves as an OGA Clinical Supervisor for the Stern Center's Orton-Gillingham Institute and works as a Literacy Specialist at Montgomery Elementary School. She holds a B.S. from SUNY Geneseo and an M.A. from Johnson State College. Outside of teaching, Lara enjoys spending time outdoors—snowshoeing, walking her dog, gardening, fishing, or golfing.

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.